CLARK

Catalog

2007-2008

www.clarku.edu/catalog

Introduction

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CLARK UNIVERSITY'S MISSION IS TO EDUCATE UNDERGRADUATE AND GRADUATE STUDENTS TO BE IMAGINATIVE AND CONTRIBUTING CITIZENS OF THE WORLD, AND TO ADVANCE THE FRONTIERS OF KNOWLEDGE AND UNDERSTANDING THROUGH RIGOROUS SCHOLARSHIP AND CREATIVE EFFORT. ◆ THE UNIVERSITY SEEKS TO PREPARE STUDENTS TO MEET THE CHALLENGES OF A COMPLEX AND RAPIDLY CHANGING SOCIETY. IN STUDENTS AND FACULTY, CLARK FOSTERS A COMMITMENT TO EXCELLENCE IN STUDYING TRADITIONAL ACADEMIC DISCIPLINES, AS WELL AS INNOVATION IN EXPLORING QUESTIONS THAT CROSS DISCIPLINARY BOUNDARIES. THE FREE PURSUIT OF INQUIRY AND THE FREE EXCHANGE OF IDEAS ARE CENTRAL TO THAT COMMITMENT. ◆ THE FOCUS OF CLARK'S ACADEMIC PROGRAM IS A LIBERAL-ARTS EDUCATION ENRICHED BY INTERACTIONS AMONG UNDERGRADUATE STUDENTS, GRADUATE STUDENTS, AND FACULTY, AND IS CLOSELY LINKED TO A SELECT NUMBER OF PROFESSIONAL PROGRAMS. CLARK ALSO SERVES STUDENTS WHO WISH TO CONTINUE FORMAL EDUCATION THROUGHOUT THEIR LIVES. ◆ THE INTELLECTUAL AND PERSONAL GROWTH OF STUDENTS IS ENHANCED BY A WIDE VARIETY OF EDUCATIONAL PROGRAMS AND EXTRACURRICULAR ACTIVITIES. CLARK BELIEVES THAT INTELLECTUAL GROWTH MUST BE ACCOMPANIED BY THE DEVELOPMENT OF VALUES, THE CULTIVATION OF RESPONSIBLE INDEPENDENCE, AND THE APPRECIATION OF A RANGE OF PERSPECTIVES. ◆ CLARK'S ACADEMIC COMMUNITY HAS LONG BEEN DISTINGUISHED BY THE PURSUIT OF SCIENTIFIC INQUIRY AND HUMANISTIC STUDIES, ENLIVENED BY A CONCERN FOR SIGNIFICANT SOCIAL ISSUES. AMONG MANY OTHER SCHOLARLY ENDEAVORS, CLARK CONTRIBUTES TO UNDERSTANDING HUMAN DEVELOPMENT, ASSESSING RELATIONSHIPS BETWEEN PEOPLE AND THE ENVIRONMENT, AND MANAGING RISK IN A TECHNOLOGICAL SOCIETY. ◆ CLARK IS DEDICATED TO BEING A DYNAMIC COMMUNITY OF LEARNERS ABLE TO THRIVE IN TODAY'S INCREASINGLY INTERRELATED SOCIETIES. THE UNIVERSITY MAINTAINS A NATIONAL AND INTERNATIONAL CHARACTER, ATTRACTING HIGH-CALIBER STUDENTS AND FACULTY FROM ALL QUARTERS OF THE GLOBE. AS A UNIVERSITY RESIDING IN AN URBAN CONTEXT, CLARK ALSO STRIVES TO ADDRESS THE NEEDS AND OPPORTUNITIES OF CONTEMPORARY URBAN LIFE.

CLARK
1887 UNIVERSITY.

Academic Catalog 2007–2008

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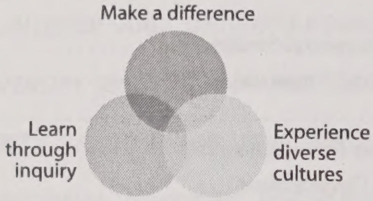
Hallmarks of a Clark Education

Clark's motto is "Challenge Convention, Change our World." Clark is a place where students and faculty learn and teach in a vibrant intellectual environment that embodies three signatures: Make a Difference, Learn through Inquiry and Experience Diverse Cultures. The three signatures are distinct but mutually reinforcing elements of a unified whole, represented visually as three overlapping circles. The Clark experience and the Clark graduate embody all three signatures.



Make a Difference describes Clark's mission as an institution that uses its intellectual capital to understand and address problems in the local and global communities of which it is a part. Because of Clark's status as a small research university, its urban location and long tradition of community partnerships, Clark is in an ideal position to make a difference in both local and global communities through the academic and extracurricular activities of its students, the scholarly activities of its faculty, and its partnerships with community organizations.

Learn through Inquiry describes Clark's commitment to hands-on learning and problem solving. The skills needed for problem solving in the discipline are developed sequentially, through a pervasive pedagogy of engagement. Throughout their Clark experience, students learn by actively working through real problems, issues and questions, mastering modes of inquiry, and acquiring the knowledge base required to ask and answer important questions. Each student has an opportunity to participate in a culminating discipline-based experience in the context of senior seminars, research or other capstone experiences.

Experience Diverse Cultures describes Clark's commitment to integrate the richness of many cultures into campus life and the student experience. Clark has melded its liberal arts focus and specific areas of research excellence to create educational programs with global reach, and has made a commitment to the value of diversity in the education of all students. Global opportunities and the intercultural character of the campus community provide a transformative experience for students.

History

Clark University is a teaching and research institution founded in 1887. Clark is the oldest graduate institution in the United States, and one of only three New England universities, with Harvard and Yale, to be a founding member of the prestigious Association of American Universities.

Clark's first president was G. Stanley Hall, founder of the American Psychological Association, who earned the first Ph.D. in psychology in this country at Harvard. Clark has played a prominent role in the development of psychology as a distinguished discipline in the United States. Clark was the location for Sigmund Freud's famous "Clark Lectures" in 1909, introducing psychoanalysis to this country.

Clark also has played an important role in the development of geography as a discipline. Clark has granted more Ph.D.s in this environmentally related area than any other school in the nation. The George Perkins Marsh Institute was the first research center created to study the human dimensions of global environmental change.

Researchers who have held Clark appointments include A.A. Michelson, the first U.S. Nobel Prize winner in the sciences; and Robert Goddard, the father of the space age and the inventor of rocket technology. Other researchers at Clark, for instance, measured the windchill factor, defined chemical double bonding, developed research leading to the birth control pill, and made the first breakthrough in understanding how brain tissue regenerates itself.

Accreditation

Clark University is accredited by the New England Association of Schools and Colleges, Inc. through its Commission on Institutions of Higher Education.

Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer-review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Inquiries regarding the accreditation status by the New England Association should be directed to the administrative staff of the institution. Individuals may also contact:

Commission on Institutions of Higher Education
New England Association of Schools and Colleges
209 Burlington Road
Bedford, MA 01730-1433
(617) 271-0022
E-mail: cihe@neasc.org

The Undergraduate Academic Program

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A Clark education is unique in that it provides a high-quality liberal arts education with personal attention and advanced study opportunities, as captured in the three Clark signatures. Most students begin their Clark career with a first-year seminar, designed to help them develop the skills and habits of mind they will need to succeed at Clark. Clark has developed a unique program of liberal studies that fosters critical thinking skills and broadens perspectives. Because they can choose among many different courses, students can take courses that interest them and, at the same time, satisfy their broad liberal arts requirements.

By the spring of sophomore year, students declare a major in which they develop depth and expertise. The University offers 32 majors, 29 minors and nine interdisciplinary concentrations, which can be combined to match individual interests and academic goals. Once students choose a major, their academic department becomes their intellectual "home," where they are able to work closely with faculty on research and other creative projects. As students acquire increasing depth and sophistication in a field of their choosing, they are able to take advantage of Clark's wide array of courses to construct an individualized program of study suited to their interests and career goals. In many fields, students have the opportunity to enter an honors program or accelerate to an advanced degree.

First-Year Seminars

First-year seminars allow students to explore, in depth, various issues and subjects. First-year seminars focus on helping students develop core academic skills that will enhance success in later Clark courses: reading, writing, speaking, thinking and debating, all at the college level of intellectual sophistication. Seminars are intensive, stimulating and challenging, and are limited to no more than 16 students each. The professor who teaches each first-year seminar also serves as academic adviser to the students in the seminar until they declare a major. Thus, students who enroll in first-year seminars start their Clark careers by developing a close relationship with both a professor and a small group of students who share at least one intellectual interest. All first-year seminars fill a Program of Liberal Studies (PLS) requirement.

First-year seminars change from year to year. As an example, these seminars are expected to be offered in fall 2007.

AS033/HIST033 Confucianism, Daoism, Buddihism

BIOL100 Biology Research Seminar in Fungal Molecular Ecology

CHEM103 Accelerated Introduction to Chemistry

COMM040 Cool

CSCI100 Seeing is Believing

CSCI110 Diving Into Computer Science Research: Investigating Sound

ECON100 Birth, Death and Economics: The Economics of World Population

EDUC050/COMM050 Communication and Culture in the Main South Neighborhood

EDUC060 Public Schools and Democracy

EN025/GES025/GEOG025 Suburban Sprawl Under the Microscope

ENG104 To the Woods: The Relevance of Thoreau's Walden in 21st-Century America

ENG113 Literature of Baseball

ENG115 Speculative Fiction

ENG121 Shakespeare Recycled

ENG131 Border Crossings: Narratives of Journey, Exile and Immigration

ENG147 Philosophy of Horror

GEOG010 Environment and Culture

GOVT093 International Human Rights

GOVT094 Dictators and Revolutionaries in Latin America

HIST040/WS040 Witchcraft: Witch Hunts in Early Modern Europe

ID011/MGMT011/UDSC011 Making a Difference

JAPN180 Japanese Culture and Literature in Translation

MATH110 Diving Into Math Research: Exploring Emotion Space

PHIL050 Relativism and Absolutism Across the Disciplines

PHIL104 The AIDS Pandemic

PHIL108/EPP108/LAS108 Privacy Protection in Law and Ethics

PSYC190 Taking Sides

PSYC194 Foundations of Psychology

SOC085 The Corporate Planet

Program of Liberal Studies

The foundation of a Clark undergraduate education is the Program of Liberal Studies. Through this program, students acquire the intellectual habits, skills and perspectives that are essential for self-directed learning. They are given a framework within which they can select a program of study and receive a broad introduction to liberal and life-long learning. Students have the option of fulfilling the requirements of the Program of Liberal Studies through the International Studies Stream, a special program which consists of courses that prepare them to better understand global, political, cultural and economic issues.

The Program of Liberal Studies has two components:

1. **Critical Thinking Courses:** While every course in the University involves work in critical thinking, two types of courses place special emphasis on the cultivation of these skills. Students take one course in each of these areas:
    - **Verbal Expression** courses place special emphasis on the relationship between writing and critical thinking within a particular discipline.
    - **Formal Analysis** courses include the use of a formal, symbolic language as appropriate for a specific discipline, rules of logic for that language, and the use of that language for modeling the subject matter of the discipline.

2. **Perspectives Courses** offer breadth and introduce students to the different ways in which various disciplines or fields define thinking, learning and knowing. Students must successfully complete one course in each of the following six perspectives categories, with each course taken in a different academic department:
   - **Aesthetic Perspective** courses emphasize artistic expression and the perception, analysis and evaluation of aesthetic form. These courses are designed to enhance students' appreciation and understanding of the arts.
   - **Global Comparative Perspective** courses introduce students to comparative analysis by exploring the cultural, political or economic aspects of human diversity around the world. They provide students with tools for analyzing human experience by examining similarities and differences in a global or international context.
   - **Historical Perspective** courses develop students' capacity to understand the contemporary world in the larger framework of tradition and history. Courses focus on the problems of interpreting the past and can also deal with the relationship between past and present. All courses are broad in scope and introduce students to the ways scholars think critically about the past, present and future.
   - **Language and Culture Perspective** courses foster the study of language as an expression of culture. Students may study foreign languages, which highlight the relationship between language and culture, or English-language courses that deal with the same issue.
   - **Natural Scientific Perspective** courses teach the principal methods and results of the study of the natural world. Courses focus on the knowledge and theoretical bases of science. They also include laboratories or similar components to introduce students to the observation of natural phenomena and the nature of scientific study.
   - **Values Perspective** courses examine the moral dimension of human life as reflected in personal behavior, institutional structures and public policy in local and global communities. Courses taught from the values perspective focus not only on the systematic formulation and analysis of moral and ethical claims, but also on how moral decisions affect both the individual and society.

Majors

Sometime before the end of their sophomore year, students choose a major—the area in which they will pursue a course of study in depth. Students may choose a traditional discipline or an interdisciplinary major, or in some cases, may design a major tailored to their particular academic interests. While anchored in one area, the undergraduate major is structured to include courses in related disciplines. This ensures that breadth of knowledge is gained along with specialization. A major consists of 12 to 19 courses designated by a department or program. Majors must be declared prior to the beginning of the junior year.

Majors are offered in:

- Ancient Civilization
- Art (Art History, Studio Art, Combined)
- Biochemistry and Molecular Biology
- Biology
- Chemistry
- Communication and Culture
- Comparative Literature
- Computer Science
- Economics
- English
- Environmental Science
- Foreign Languages (French, Spanish, Combined)
- Geography
- Global Environmental Studies
- Government and International Relations
- History
- International Development and Social Change
- Management
- Mathematics
- Music
- Philosophy
- Physics
- Psychology
- Screen Studies
- Sociology
- Theater Arts
- Women's and Gender Studies

Interdisciplinary Majors

One of Clark's strengths is the eagerness of faculty and students to cross the traditional boundaries between academic fields. Interdisciplinary majors, special programs and concentrations help students to see beyond the barriers of academic specialization.

Student-Designed Majors

While most Clark students can and do fulfill their academic goals through regularly established departments and interdisciplinary programs, the University recognizes that some students may have special interests and goals that cannot be met through normal channels. The student-designed major program is intended to provide flexibility for these students while ensuring rigorous academic standards. Students are normally expected to have a GPA of 3.0 or higher to pursue the student-designed major. Student-designed majors are coordinated by the associate dean of the college and developed with the guidance of three faculty advisers. They must be approved by the associate dean of the college by the beginning of the junior year. Guidelines for student-designed majors are available in the Dean of the College Office and Academic Advising Center.

Minors

Minors give students an opportunity to gain depth in an academic area in addition to their major field of study. Minors are offered in:

- Ancient Civilization
- Art History
- Biochemistry and Molecular Biology
- Biology
- Chemistry
- Communication and Culture
- Computer Science
- Economics
- Education
- English
- Entrepreneurship
- Environmental Science
- Foreign Languages (French, German, Spanish)
- Geography
- Global Environmental Studies
- Government and International Relations
- History
- International Development and Social Change
- Management
- Mathematics
- Music
- Philosophy
- Physics
- Screen Studies
- Sociology
- Theater Arts
- Women's and Gender Studies

Concentrations

Concentrations allow students to cross traditional academic disciplines to gain broad perspectives on a subject in addition to their major. Concentrations are offered in:

- Asian Studies
- Bioinformatics
- Ethics and Public Policy
- Holocaust and Genocide Studies
- Jewish Studies
- Law and Society
- Peace Studies
- Race and Ethnic Relations
- Urban Development and Social Change

Additional Academic Opportunities

Accelerated B.A./Master's Degree Programs

Clark offers several programs that allow students to complete the requirements for bachelor's and master's degrees in an accelerated, five-year period. Students may obtain a master of arts (M.A.), master of business administration (M.B.A.), master of public administration (M.P.A.), master of science in finance (M.S.F.), master of science in professional communication (M.S.P.C.), master of arts in teaching (M.A.T.) or master of arts in education (M.A.Ed.). Students apply to the accelerated B.A./Master's degree programs in their junior year, begin meeting requirements in their senior year, and complete those requirements in the fifth year. Bachelor's degrees are granted en route to the master's degree.

For students meeting eligibility requirements, the fifth year is tuition free. To qualify for free tuition in the fifth year, a student must: be a full-time undergraduate for four years at Clark; meet bachelor's/master's course prerequisites and receive a Clark bachelor's degree within five years of initial entry into Clark; earn an overall 3.25 grade-point average during the second and third years and again in the fourth year.

Undergraduates who transfer to Clark are eligible for a 50 percent tuition fellowship during the fifth year of study. To qualify, a transfer student must begin full-time study at Clark no later than the end of the sophomore year; earn at least a 3.25 grade-point average for courses taken at Clark; maintain a 3.25 grade-point average during the fourth year; and meet program course requirements.

The University has approved accelerated programs in biology; business administration; chemistry; community development and planning; education; environmental science and policy; finance; geographic information science; history; international development and social change; physics; professional communication; and public administration.

For further information and application procedures, visit www.clarku.edu/accelerate or contact the Graduate School at (508) 793-7676.

Preprofessional Programs

Clark University recognizes that preparation for a professional career is fully compatible with a liberal-arts education. The Prelaw Program is administered through Career Services in conjunction with a faculty advisory committee. Contact Career Services for more information. Students interested in any career related to medicine are advised through the Medical Careers Advising Program. Those specifically interested in applying to doctoral-level programs of medicine or dentistry work with the Premedical and Predental Advisory Committee. For more information, contact advisory committee chair David Thurlow, Chemistry Department.

Internships

Students are offered the opportunity to earn credit working off campus as part of their educational program. Academic credit is offered for internships that take place under the supervision of carefully selected agency sponsors in conjunction with appropriate Clark faculty. More information on academic internships can be found on the Career Services Web pages.

Clark also participates in the Washington Semester Program with American University in Washington, D.C., and the Washington Center for Internships and Academic Seminars. Qualified students may participate in these programs and spend a semester studying and working in the nation's capital. Both programs are coordinated by Adriane van Gils, Office of Study Abroad.

Study Abroad

Clark University is well known for its international character and committed to encouraging a strong Clark presence abroad and an international presence on campus. The Office of Study Abroad Programs coordinates international study programs. Clark has programs in Australia, China, the Dominican Republic, England, France, Germany, Japan, Scotland, Spain and Namibia.

Students who study abroad on a Clark program pay the International Program Fee (approx. tuition, room and board). Students may earn up to a full year of credit through study abroad. Students interested in study abroad should consult the Office of Study Abroad Programs at Dana Commons. Call (508) 793-7363 or visit www.clarku.edu/offices/studyabroad for more information.

Leir Program Luxembourg

The Leir Program in Luxembourg offers students and faculty additional opportunities for study and research abroad. A special feature of the program is the May Term, which begins right after the end of the spring semester. Clark and Holy Cross faculty take groups of students to Luxembourg on an academic program especially suited for Luxembourg and its environment. For further information, please contact Uwe Gertz at (508)793-7634.

3/2 Engineering Program

The 3/2 engineering program consists of three years of studies at Clark followed by two years at an affiliated engineering school. The program leads to a bachelor of arts degree from Clark after four years and, after the fifth year, a bachelor of science in engineering from the engineering school. Clark offers 3/2 engineering programs with Columbia University, Washington University and Worcester Polytechnic Institute. For more information, contact program coordinator Charles Agosta in the physics department.

Colleges of Worcester Consortium

Clark is a member of the Colleges of Worcester Consortium, which means that Clark sophomores, juniors and seniors can enroll for one course a semester at Anna Maria College, Assumption College, Atlantic Union College, College of the Holy Cross, Worcester Polytechnic Institute, Worcester State College, University of Massachusetts Medical School, Tufts University Veterinary School, Becker College, Quinsigamond Community College, Massachusetts College of Pharmacy and Health Sciences, or Nichols College.

Consortium Gerontology Studies Program

The Worcester Gerontology Studies Program is offered through the Colleges of Worcester Consortium. Courses related to aging are available at various consortium colleges, reflecting the multidisciplinary nature of gerontology. This program provides courses and internships in a coordinated curriculum leading to a certificate in gerontology. Career planning for participating students is organized through the consortium in coordination with on-campus career services.

For further information about the Gerontology Studies Program, contact program adviser Deborah Merrill, Clark Sociology Department, or the program coordinator, Kelly Niles-Yokum, at 508-754-6829, ext. 3017.

Academic Support Services

Academic Advising

The Academic Advising Center helps students plan their academic programs through a coordinated set of activities and services. All new students are assigned a faculty adviser who helps them select courses and programs. Once a student has chosen a major, academic advising is coordinated by faculty within the student's major department.

Among the Academic Advising Center's support services are:

- **The Writing Center:** Recognizing the importance of writing in all fields, Clark offers cross-disciplinary, departmental and special writing-center programs. Supplementing the curriculum, Clark's Writing Center provides individual tutoring and noncredit workshops for all interested students. Writing-center offerings are flexibly designed to help students at all levels achieve clear, correct graceful writing.
- **Disability Services:** These services are designed to foster functional independence for students with disabilities. The coordinator of disability services offers advising and helps students who have submitted appropriate documentation negotiate reasonable accommodations. An early orientation for eligible first-year students is also part of these services.

English as a Second Language:
American Language and Culture Institute (ALCI)

Clark University's American Language and Culture Institute, known to students around the world as ALCI, offers intensive ESL programs for students who want to improve their English-language skills for academic or professional reasons. Through experiential learning, students receive a thorough orientation into American culture. ALCI serves as a resource for international undergraduates, graduate and Worcester-area community students for whom English is a second language, providing further opportunities in the training of speaking the English language, orientation to American life and culture, and preparation for successful university study.

Instruction is offered at up to five levels of proficiency, beginning through academic preparation. Dedicated, trained professionals provide 20 or more hours per week of intensive ESL instruction, as well as private tutorial sessions. Students are entitled to many services offered by the University including the Goddard Library, computer laboratories, athletic facilities, social activities, campus lectures and day trips to local and regional places of interest.

For more information about ALCI classes and/or programs, call ALCI at 508-793-7794.

Tuition and Financial Aid

Tuition, board, residence-hall charges and certain fees are due and payable prior to the beginning of each semester. The dates for 2007-2008 are: July 23, 2007 for fall semester and December 14, 2007 for spring semester. Students are not permitted to register for any semester until all financial obligations have been arranged satisfactorily with the University.

A budget payment plan is available and is explained later in this section.

There is a late fee of $50 assessed against all accounts not paid in full by the July and December due dates. In addition, interest at the rate of 1 percent per month (12.7% APR) will be charged on all past-due balances (including tuition deposit). If a student fails to fulfill his or her financial obligations and his or her account is referred to a collection agency, all fees are the responsibility of the student.

Summary of Tuition and Other Charges for First and Second Semester of Academic Year 2007 - 2008

Tuition	$32,600
Room: Residence Hall/Home	
Single room	5,900
Singles within suites	6,400
Double room	3,700
Double within suites	4,300
Triple room	3,700
Quad	3,700
New Resident Apartment Singles	7,300
New Resident Apartment Doubles	5,200
Board (Compulsory for 1st- and 2nd-year students)	2,600
Student Activity Fee	265
Charges that apply to new students only:	
Contingency Deposit (refundable)	50
Orientation Fee	200
International and Early Arrival Orientation Fee	250
Transfer Orientation Fee	100
Spring Orientation Fee	100
Other Fees	
Clark Student Health Insurance	
Billed in the fall only for returning students*	$1,041
Students will be required to enroll in the Clark Insurance Plan unless they complete a waiver card stating they have other coverage	
Application Fee (undergraduate)	55
Deposits	
Admission Deposit	300
Residence Hall Deposit	100
Tuition Deposit (upper class students)	300

Note: Costs are subject to change year to year.

Payment Options

Clark offers several payment alternatives to the usual tuition payment each semester. These options may be used individually or in combination with each other to best suit the needs of Clark families.

Monthly Payment Plan: Clark University, in cooperation with Tuition Management Systems, makes available a flexible, interest-free payment plan. This plan allows a family to make 10 equal monthly payments beginning in June. You determine the amount of the bill to be covered—all or only a portion. The $65 application fee is the only charge. Tuition-payment insurance is automatically included.

Tuition Inflation Hedge: Under this program, Clark University offers families the option of fixing the tuition rate for four years at the first-year level. To do so, families pay four years of full tuition during the first year, at the current rate, avoiding any increases in tuition for the following three years.

For more information and an application, please contact the associate controller/bursar at (508) 793-7498.

All past balances will be subject to an interest charge of 12 percent per year.

Refund Policies

General Refund Policy

Students who officially withdraw or take an official leave of absence from the University are required to submit paper work to the Dean of Student's Office. A student who officially withdraws during the first one-tenth of the semester will be charged 10 percent of his or her tuition, room, board and mandatory fees; after the first tenth, but before the end of the first quarter, the student will be charged 50 percent; after the first quarter, but before the end of the second quarter, the student will be charged 75 percent. There is no reduction in charges after the second quarter of the semester. If a student withdraws from school, but continues to avail himself/herself of services, he/she will be charged for those services.

Study-Abroad Refund Policy

Due to the special conditions for payments to overseas programs, a different policy is necessary. Students who are studying abroad should refer to the documentation provided when they are accepted in the program for specific information on the refund policy.

Medical Refund Policy

If a student's doctor recommends that he/she leave the University for medical reasons within the first half of the semester, and later a decision is made that the student must officially withdraw, charges are calculated in accordance with the schedule above under "General Refund Policy" based on the date of the doctor's initial recommendation that the student leave the University. The doctor's letter must be an original on letterhead.

Normal Program and Course Load Variance

A normal full-time academic program is eight course units per year (four course units per semester). Students may elect to vary this pattern by taking three course units during any semester. A course load of three units per semester is considered full-time and billed accordingly. Juniors and seniors who have received College Board permission may choose to take five course units in a semester at no additional charge. (Any courses approved by College Board beyond five units will carry an additional cost.) All students must complete a minimum of seven full-time semesters to meet degree requirements. Students may enroll in two units per summer. While there is no limit to the total number of summer courses students may take, normally only four units may be counted toward graduation.

Seniors in their last semester are expected to take the necessary number of units (up to five) for their degree. Full-time first-year or transfer students in their first semester at Clark University must enroll in a four-unit program. Students re-entering the University or returning from leaves of absence, also must enroll in a four-unit program during their first semester.

Orientation Fee

A fee of $200 is assessed to all new students to cover services and activities provided during orientation. Early orientation is $250 and spring orientation is $100.

Contingency Deposit

All new undergraduates are required to pay a $50 deposit to cover minor charges, such as unreturned library books, which may be incurred during the year. Students are billed each year for whatever charges are incurred. The balance is refunded upon completion of studies.

Housing Deposit

The $400 fee submitted by first-year students to Admissions includes a $100 housing deposit. The deposit is credited towards the yearly housing fee and is nonrefundable.

Application Fee

A fee of $55 must accompany the application for admission to the University. It is not refundable.

Student Activity Fee

A fee of $132.50 per semester, levied and administered by the Student Council, is required of all matriculated undergraduates except those on a program of study abroad. The Student Council allocates funds to student organizations that provide a wide range of cultural, social and recreational activities.

Admission Deposit

For entering students planning to live on campus, a nonrefundable admission deposit of $300 and a housing deposit of $100 are required to indicate acceptance of an offer of undergraduate admission. For students planning to live off campus, only the $300 admission deposit is required. Deposits are credited toward charges for the first semester in attendance at Clark. Deposits are forfeited if the student does not enroll for the specified semester.

Tuition Deposit

A deposit of $300 is required of all students planning to return to the University for their sophomore, junior or senior years. It is payable by June 1 and is credited toward charges for the fall semester. The deposit of $300 is forfeited if the student does not enroll for the specified semester.

Clark OneCard

An identification card is issued during orientation to all new students without charge and is an official college ID. The Clark OneCard looks like an ordinary University ID, but it's much more than that. The wide magnetic strip on the back of the Clark OneCard acts as a key to a number of services on campus including access to residential and academic buildings, athletic facilities, Dolan Field House, Goddard Library, meal plans, computer account password and the CashCard Program.

The CashCard Program works like cash and can be used at both on- and off-campus venues. On-campus venues include Clark Dining Hall, Higgins Bistro, Clark Print & Copy Center and Clark Bookstore. Off-campus venues include Domino's Pizza, Fantastic Pizza and PepperCorn's Grille.

The cardholder should report a lost or stolen card immediately to the University Police or I.D. Office, the food-services provider on campus, or the ID office located at 22 Downing Street, 2nd floor. A fee is charged to replace lost, stolen or damaged cards.

Keys and Key Security

Room keys, mailbox combinations and residence-hall entry cards are issued to students upon arrival at Clark. Fees are charged for the replacement of keys and cards that are lost during the year, and it is mandatory to return room keys and entry cards before leaving campus at the end of the academic year.

Financial Aid

The Office of Financial Assistance provides guidance to all students who need assistance financing their Clark education.

Financial aid is allocated on the basis of financial need and academic performance. Special talent in music, art and other areas, as well as leadership ability, are also considered. The Office of Financial Assistance assesses each student's financial circumstances and need through a uniform analysis of the Free Application for Federal Student Aid (FAFSA) for federal and state funds, and the PROFILE Form for institutional funds. When required, adjustments are made in accordance with University policies and procedures. The assessment takes into account family income and assets, age of parents, financial commitments to other dependents and members of the family, and other circumstances.

The University expects that a student's resources for education will come first from family and his/her own savings and earnings. The University will make every effort to assist most students in obtaining the difference between the total cost and expected family resources. No student should fail to apply for admission to Clark University because of the inability of his/her family to pay total educational costs.

Student Employment

Student employment opportunities at Clark include on- and off-campus part-time jobs and full-time summer employment, coordinated by the Office of Financial Assistance. At the beginning of each semester, Clark students with federal work-study awards receive a listing of available on-campus jobs and may choose a job best suited to their abilities and interests. It is important to note that an offer of Federal Work Study as part of a student's financial-aid package is not a guarantee of that amount, but rather a limit of potential earnings. Students receive paychecks for actual hours worked, which can be used for personal expenses, books and supplies, or saved for future bill charges. The Office of Financial Assistance also maintains a list of on- and off-campus jobs available to students not receiving federal work-study awards.

Independent Sources of Aid

All applicants for financial aid are urged to pursue independent sources of financial aid. Clark cannot replace outside funds for which a student is eligible but fails to apply. Scholarships are often awarded to graduating seniors by high schools and/or private scholarship agencies in students' local communities. Additional information usually is available in guidance offices or online at www.fastweb.com.

Any assistance received from outside sources other than Clark University must be reported to the Office of Financial Assistance on the Award Acceptance Agreement form or in writing to the Office of Financial Assistance. These awards may affect your Clark financial-aid package.

Clark's policy for these adjustments is as follows:

- For scholarships derived from meritorious sources that are in recognition of a particular achievement of the student, unmet institutional need will be filled first. Any remaining scholarship will reduce loan, then work-study. If there is additional remaining scholarship, it will reduce Clark grant, dollar for dollar.
- Private grants/scholarships derived from nonmeritorious sources (state or federal grants or tuition subsidies based on parents' employment) will reduce Clark grant, dollar for dollar.
- An important source of federal financial aid is offered in the form of Federal Pell Grants. These grants, which vary in amounts, are available to certain students who demonstrate financial need according to federal methodology.
- Federal Stafford Loans are available to all students, regardless of need. Students may borrow up to $3,500 their freshman year, $4,500 sophomore year and $5,500 the junior and senior years of an undergraduate program. Students may borrow up to $20,500 per year of a graduate program. The subsidized version is limited to students who demonstrate financial need according to federal methodology. The interest rate is fixed on the Stafford loan at 6.8 percent. No payments are due, or accrue interest, until after graduation or until a student is enrolled less than half time. It may be deferred for continued education. The unsubsidized version offers the same terms and conditions; however, interest begins to accrue during the in-school period.
- Veteran's benefits may be available for service veterans and children of deceased or disabled veterans. Eligibility can be determined by contacting the local Veteran's Administration Office.
- Rehabilitation assistance may be available for students who qualify for educational benefits. Information concerning rehabilitation services can be obtained at the State Rehabilitation Office.

Aid Awarded by Clark University

Clark University makes a commitment to entering students during their first year and in each subsequent year at Clark, as long as they continue to demonstrate financial need, continue to meet the standards of satisfactory academic progress, have filed all necessary application materials by the required deadlines and have not exceeded program limitations of financial aid, and as long as federal and state funding to Clark's Office of Financial Assistance continues at the same level. Although any Clark student may apply for aid as an upperclassman, funding is guaranteed only to those students who received aid their first year at Clark and have met the above requirements.

Assistance at Clark is packaged in the form of scholarship, loan grant and/or employment from the following sources:

- **Alumni and Friends Scholarship Program**—A portion of the University income is reserved for this purpose, and gifts from alumni, parents and friends provide additional scholarship funds. Eligibility for Clark Scholarships is determined under institutional methodology used in the analysis of the aid application materials.
- **Federal Supplemental Educational Opportunity Grants**—One of three campus-based federal-aid programs available to college students demonstrating exceptional financial need. Continued support of this program is contingent upon annual Congressional allocations.
- **Federal Perkins Loans**—One of three campus-based federal-aid programs available to college students demonstrating exceptional financial need. Loans made under this program carry a fixed 5 percent interest rate. Payment of principal and accrual of interest is deferred until after graduation or until a student is enrolled less than half time. The loans carry a 10-year repayment schedule with a $40 monthly minimum. Continued support of this program is contingent upon annual Congressional allocations and the repayments of previous recipients.
- **Federal Work Study**—One of three campus-based, federal, student-aid programs, this work program gives eligible students the opportunity to work during the school year to earn money for personal expenses, travel, books and supplies; and over the summer towards the following school year's educational expenses.
- **Presidential and Achievement Scholarships**—Awarded to incoming students based on specific academic criteria, all recipients of these scholarships are selected as part of the admissions application process. All scholarships are renewable if a student meets certain academic criteria while at Clark University.

Satisfactory Academic Progress

Students receiving federal financial assistance of any type (including parent loans) are required to make "satisfactory academic progress" toward their degree. Satisfactory academic progress is defined by regulations of the U.S. Department of Education as "proceeding in a positive manner toward fulfilling degree requirements." This is differentiated from "academic standing," which refers to students whom the institution allows to continue to enroll.

Full-time bachelor's degree candidates must maintain a 2.0 cumulative grade-point average and complete five courses the first year; six courses the second; and seven courses each year thereafter. These requirements are prorated for less than full-time students and students attending less than a full academic year. Evaluation of satisfactory academic progress is made at the end of each spring term.

Students who are determined not to be making satisfactory academic progress are allowed one semester of continued assistance under probation status in order to obtain the necessary requirements for maintaining progress. If students are still not making progress after one semester of probation, aid is discontinued. Students are allowed only one semester of probation while at Clark. Appeals to this policy for special and unusual circumstances may be made in writing to the director of financial assistance.

Students are limited to eight undergraduate semesters of institutional (Clark) financial aid, unless otherwise approved by the director. Appeals should be written to the director of financial assistance.

Return of Title IV Funds (federal and some state financial aid)

Title IV fund rules assume that a student earns his or her aid based on the period of time he or she remained enrolled for the term. Unearned aid, other than work-study, must be returned to the U.S. Department of Education up until the 60 percent point in the term. At the 60 percent point in the term, the student is considered to have earned all of his or her aid.

Return of Institutional Financial Aid

Students are allowed to retain institutional financial aid (Clark grants and scholarships, including academic scholarships) at the same rate that the credit-to-tuition (refund) policy is calculated. That is to say, a student leaving or withdrawing in the first tenth of a semester has earned 10 percent of their institutional financial aid, students leaving or withdrawing in the first quarter are allowed to retain 50 percent of their financial aid, students withdrawing during the second quarter may retain 75 percent of their aid, and students leaving or withdrawing after the second quarter may retain 100 percent of their Clark financial aid.

Financial Assistance for International Students

The Admissions and Financial Aid Committee, in keeping with Clark University's commitment to a prevalent international presence on campus, provides financial assistance to a limited number of international students each year. Competition for this assistance is extremely keen and the awards are based on both academic merit and financial need. Since the ability to meet the cost of attendance at Clark University must be taken into consideration, the admissions process is need-aware. Several applicants each year show excellent academic records but do not demonstrate the financial ability necessary to meet the full cost of attendance. It is not unusual for the committee to deny an application on financial grounds even though the applicant is academically qualified.

Undergraduate Admissions Requirements

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First-Year Student Admission

Clark University welcomes applications from men and women regardless of race, color, sex, sexual orientation, religion, age as defined by law, handicap, national origin or financial condition. Selection is competitive and based primarily on academic promise as indicated by secondary-school performance, recommendations and standardized test (SAT, ACT) scores. Secondarily, decisions reflect consideration of the individual experience and particular circumstances unique to each candidate.

Entrance Requirements

A diploma from an accredited secondary school or G.E.D. equivalency is required for admission to Clark. The academic preparation for successful candidates should include four years of English; three years of mathematics; three years of science; two years of both a social science and a foreign language; and other credit electives recognized in the secondary-school curriculum, including the arts. The University is most concerned with the strength of the student's academic program and therefore recommends this framework of courses. However, the University values diversity and understands that some students may be following different high school-curricular patterns.

The Application

Students applying to Clark should contact the Admissions Office for an application or they may use the Common Application or various electronic applications. The admissions staff has no preference for any particular application form, but may request supplemental information when needed. A nonrefundable application fee of $55 or official fee-waiver request must accompany the application. Transfer and international students should contact the Admissions Office for specific supplemental forms.

Clark University
Admissions Office
950 Main Street
Worcester, MA 01610-1477
Telephone: 508-793-7431
Fax: 508-793-8821
E-mail: admissions@clarku.edu

Students applying for financial assistance should refer to information provided in the "Undergraduate Tuition and Financial Aid" section of this catalog.

Early Admission

Exceptional students are welcome to apply for early admission after the junior year when encouraged and supported by enthusiastic recommendations from their secondary schools.

Early Decision

If Clark University is clearly your first choice, we encourage you to apply "Early Decision." By signing the Early Decision statement you agree that, if admitted, you will withdraw all other college applications. The Early Decision deadline is Nov. 15, with notification by early January. A candidate who is deferred under Early Decision will automatically be reconsidered for regular admission in March.

Regular Admission

Candidates for admission in September should apply as early as possible, usually during the first grading period of their final year of secondary school. The deadline for applications and supporting credentials is Jan. 15. (Nov. 1 for January admission.)

Admission Tests

All U.S. first-year students are required to submit results of the SAT I or American College Test (ACT).

If English is not your primary language, you should submit scores from the Test of English as a Foreign Language (TOEFL). Successful candidates usually score 80 (ibt) or better. (See section on International Admissions.)

Interviews and Campus Visits

Interviews are not required but are strongly recommended. The most informative way to learn about Clark University is to spend a day on campus. Prospective students are invited to take tours, sit in on classes and meet students and faculty members. Please call, write or e-mail the Admissions Office for information regarding interviews, tour schedules and directions.

The Alumni and Parent Admissions Program offers alumni interviews to students who cannot visit campus. We encourage you to take advantage of this opportunity. Please contact the Admissions Office for details.

Admission Notification and Deposits

Admissions decisions for September are released on or about April 1. Clark subscribes to the Candidate's Reply Date of May 1 and requires a nonrefundable deposit that is credited toward first-semester charges. January applicants can expect to receive an admission decision by mid-December with the deposit due within two weeks of notification.

Deferred Admission

Students who want to postpone enrollment must submit a request in writing by the assigned deadline. A nonrefundable deposit that is credited toward first-semester charges is required. Students who undertake full-time academic work in the interim may not defer enrollment but must reactivate their applications and submit official transcripts for review.

Advanced Standing

Students may earn advanced standing with scores of 4 or 5 on Advanced Placement (AP) tests administered by the College Entrance Examination Board, submission of certain other educational credentials (i.e., International Baccalaureate, Abitur, A-Levels, etc.) and by transferring credit from college-level course work.

International Admission

Students applying to Clark should contact the Admissions Office for an application or they may use the Common Application or various electronic applications. The admissions staff has no preference for any particular application form, but may request supplemental information when needed. A nonrefundable application fee of $55 or official fee-waiver request must accompany the application. Because of the sequential nature of University courses, Clark encourages all international students to apply for the fall semester (deadline January 15).

The Test of English as a Foreign Language (TOEFL) is required of all candidates whose native or official language is not English. Information concerning test dates and locations may be obtained by writing to: TOEFL, P.O. Box 6151, Princeton, NJ 08541-6151 U.S.A. or at www.toefl.org. The Certificate of Eligibility (I-20 form) necessary to obtain a student visa will be granted only after full admission and receipt of complete financial documentation (in the form of an official bank statement indicating a monetary amount).

Transfer Admission

Clark welcomes applications for admission with advanced standing from students attending two- and four-year institutions. Transfer applicants may use the Transfer Common Application. The Application Supplement must also be submitted. Applicants for September should file by April 1; January applicants by Nov. 1. All transfer candidates are required to submit evidence of good standing, complete transcripts of all previous academic work—secondary and postsecondary—including standardized tests (if taken) and any other information requested by the Admissions Committee, such as recommendations and course catalogs.

Normally, credit is given for academic courses in the liberal arts previously taken at accredited colleges and universities and by advanced standing procedures, described above. No credit is given for grades lower than C. Evaluation of credits for college courses is made at the time of admission or upon receipt of final transcripts and is used in planning a program of study at the University. Up to 50 percent of Clark's degree and major requirements may be awarded on this basis, and a minimum of two academic years at Clark is necessary for completion of degree requirements.

Requirements for a Bachelor's Degree

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Academic credit toward the Bachelor of Arts is expressed in terms of course units. Each Clark course is awarded one unit (equivalent to four credit hours). To earn a bachelor's degree, a student must complete a minimum of 32 course units (128 credit hours) with a minimum overall 2.0 grade-point average. He/she may receive no more than four D or D+ grades. Bachelor's degree candidates must also successfully complete all institutional, major departmental and Program of Liberal Studies requirements for graduation. Transfer credit for students with fewer than 32 course units in residence is established by the Transfer Evaluation Committee. Students may accelerate their progress toward graduation by no more than one semester without special approval of the College Board. For the purpose of transfer, a full Clark unit is equivalent to four semester hours of credit.

Transfer Credit

To earn a bachelor's degree at Clark, a student must earn at least one half of the total number of course units taken for fulfillment of a major in a Clark program. Students must be enrolled full time at Clark for both semesters of their senior year. Units earned through Clark programs off campus also meet the requirement. "External credit" is credit earned in the following categories:

1. Advanced placement
2. Credits transferred from other American colleges and universities
3. Credit earned in foreign-study programs administered by American or foreign institutions of higher learning other than Clark.

The amount of transfer credit that can be applied to a bachelor's degree at Clark is limited by category.

1. No more than one semester (four units) may be granted in advanced placement (A.P.). A.P. credit is defined as one unit of degree credit assigned for a score of 4 or 5 on a CEEB A.P. examination taken prior to matriculation and before the student formally enrolls. Students also may receive credit for college work completed prior to their matriculation at Clark University if that credit is in a content area deemed academically acceptable to Clark and is from an accredited college or university.
2. Students who present an IB Diploma and who also earn a minimum of 36 composite points with a score of 5 or higher in all six of their IB examinations will receive eight Clark units (one full year). Students who present an IB Diploma (a minimum of 24 composite points) will receive four Clark units (one semester). Students who do not complete the full IB Diploma will receive one Clark unit for each higher level examination with a score of 5 or better up to a maximum of four Clark units (one semester).
3. Students transferring to Clark from another institution may transfer in no more than 16 units of course credit. Students who begin their course work at Clark may subsequently transfer up to 12 units of course credit from other schools.
4. Normally, no more than one year (eight course units) may be taken in study-abroad programs.

Academic Regulations

Full-time study is defined as a three- or four-unit program. Normally, undergraduates enroll in four courses per semester. Students should consult their faculty advisers, or in some cases, the Academic Advising Center or major departments when questions about course or program selections arise. With approval from the College Board, juniors and seniors with a minimum GPA of 3.0 in their prior semester, or with a minimum cumulative GPA of 3.0, may enroll in a fifth course.

While first-year students and sophomores may choose any course designated by a department as open to them, 200-level courses are normally designed for juniors and seniors. Juniors and seniors may elect any 100- or 200-level course, provided they have met all required prerequisites and have the permission of the faculty member, if necessary.

Undergraduates may be admitted to 300-level graduate courses with the approval of the instructor.

Grades

Grades are an indication of individual performance in each course taken at the University. At Clark, four grading options are currently in use:

1. **Graded courses:** This option uses the symbols A, B, C, D, and F with the modifying symbols "+" and "–" for A, B, and C. The lowest passing grade is D.

   The faculty has approved the following qualitative description of grades:

   A indicates work of distinction, of exceptionally high quality
   B indicates good work, but not of distinction
   C indicates average work and satisfaction of University degree requirements
   D indicates marginal work
   F indicates unacceptable work

2. **The Pass/No Record Option:** This option uses the symbols P and NR. P indicates work at a level of C- or better. Neither the P grade nor its credit is included in the calculation of the grade-point average. Performance below a C- results in a No Record (NR) grade. NRs do not appear on students' transcripts. Students must choose this grade option during the add/drop period. There is no limit to the number of NR grades that a student may receive. However, NR grades do not carry credit and are not counted toward graduation or University requirements.
3. **The Credit/No Credit Option:** This grading option, assigned by the University to a course, uses the symbols CR/NC. CR indicates work at a level of C- or better. The NC is treated like an F.

Grade-point averages are calculated by the University to determine academic good standing, semester academic honors, Latin honors at graduation and eligibility for various honor societies. The grade-point average is calculated as the average of grades earned in all Clark University graded courses. Neither external credit nor ungraded Clark University courses are included in this calculation.

Pass/No Record Option

The availability of the pass/no record option is designed to offer students the opportunity to take a course, usually unrelated to their major, without risking a negative impact on their GPA.

All students should bear in mind that the majority of graduate and professional schools encourage applicants to have graded courses. Preprofessional students and those for whom graduate school is a goal should exercise caution in selecting the pass/no record option. Students who are interested in attaining honors, such as Phi Beta Kappa, Dean's

List and Latin honors at graduation, also should exercise use of the option cautiously.

Noncredit Audit Status

With the permission of the instructor, full-time degree students are eligible to audit one course per semester. There is no additional charge for this privilege. Part-time matriculated students also may register as auditors with the permission of the instructor and the payment of a per course fee. In limited or sectioned courses, regularly enrolled Clark students are given preference for available openings.

Matriculated students who successfully complete audited courses (as determined by the instructor) will have the audited courses posted on their permanent records.

Withdrawal from Courses

A student may withdraw from a course at any time during the add/drop period without having a W recorded on his or her transcript. Students may withdraw from a class up until the end of the tenth week of classes, but any withdrawal after the add/drop period will result in a W being recorded on the transcript. Students compelled to withdraw from a course due to exceptional circumstances (e.g., serious illness) may petition the College Board for a WR grade (withdrawal with reason.)

Incompletes

A record of incomplete may be permitted by approval of the College Board only when sickness or some other unavoidable circumstance prevents completion of the course. Individual instructors may not assign incompletes without College Board approval. A record of incomplete incurred in the fall semester must be made up no later than the following April 1; if incurred in the spring semester, it must be made up no later than the following Oct. 1. If a course is not completed within the specified time, the record of incomplete is changed to F.

Registration

All students are expected to register in November for the spring semester and again in April for the following fall semester. Registrations must be finalized by the end of each semester's add/drop period. Notification of the dates for registration is given, and failure to register within the announced period results in a late fee.

Examinations

Final examinations are given at the end of most courses. Approximately one week is set aside for each examination period, and an attempt is made to distribute examinations for individual students evenly throughout this period. Absence from a final examination, except for the most compelling reasons, may result in a failure for the course.

Comprehensive final exams are not to be given (or due) during the last week of class or during the scheduled reading period. Other examinations and tests may be given at any time during the course at the discretion of the instructor.

Class Attendance

There is no university-wide class attendance policy. However, many individual instructors do set attendance requirements for their courses.

Student Absence Due to Religious Beliefs

According to Massachusetts state law, any student who is unable, because of his or her religious beliefs, to attend classes or to participate in any examination, study or work requirement on a particular day, will be excused from that requirement. He or she will have an opportunity to make up any examination, study or work requirement missed because of such absence, provided the makeup examination or work does not create an unreasonable burden on the University. No fees will be charged by the University for making such opportunities available. No adverse or prejudicial effects will result to any students availing themselves of these provisions.

Course Changes

Students may add and drop courses during each semester's add/drop period. Thereafter, a student may enter a course only with the permission of the instructor and the College Board.

Partial Programs

In special circumstances, students may be permitted by the dean of students to register for a semester program of fewer than three course units. These students are designated as part-time students.

Guest and Special Students

Guest students from other colleges and universities who want to study at Clark for one or two semesters, and special students who want to take only a few courses without enrolling as degree candidates, may seek approval to do so. Students who wish to enroll as guest students should contact the Admissions Office. Those interested in special student status should contact the Office of Student Records.

Academic Standing

Academic standing is reviewed each semester and is based upon performance during the previous semester. All students are required to pass at least two courses each semester and to maintain a 2.0 grade-point average. In order to remain in good academic standing, first-year students must complete at least five courses with a minimum 2.0 grade-point average by the conclusion of their first year. Sophomores, juniors and seniors must complete at least six courses with a minimum 2.0 grade-point average for the year. In addition, students may earn no more than four D or D+ grades for credit towards graduation. Students who fail to meet these requirements will be placed on academic probation for the next semester for which they enroll at the institution.

Students who do not maintain good academic standing may be placed on academic probation or may be dismissed by the College Board. The progress of students, who are placed on academic probation, is reviewed by the board at the end of the semester on probation.

Students on probation are expected to complete four courses with a 2.0 average or face a required withdrawal for the subsequent semester. A second required withdrawal requires the student to complete two courses at another institution within one semester with grades of C or higher, prior to their application for readmission to Clark. A third required withdrawal is final.

Academic Integrity

Academic integrity is a basic value for all higher learning. Simply expressed, it requires that work presented must be wholly one's own and unique to that course. All direct quotations must be identified by source. Academic integrity can be violated in many ways: for example, by submitting someone else's paper as one's own; cheating on an exam; submitting one paper to more than one class; copying a computer program; altering data in an experiment; or quoting published material without proper citation of references or sources. Attempts to alter an official academic record will also be treated as violations of academic integrity.

To ensure academic integrity and safeguard students' rights, all suspected violations of academic integrity are reported to the College Board. Such reports must be carefully documented, and students accused of the infraction are notified of the charge. In the case of proven academic dishonesty, the student will receive a sanction, which may range from an F in the assignment or course to suspension or expulsion from the University.

Leaves of Absence

A student who is in good standing may apply to the dean of students for a leave of absence, after which he or she may return to the University without formal application for readmission.

Withdrawals

Students who fail to enroll without taking a formal leave of absence will be administratively withdrawn from the institution. To be considered for readmission, students must apply to the dean of students.

Departmental Honors

Students may be admitted to a program leading to a bachelor's degree with honors in a particular major at the beginning of the junior year or, in some cases, at the beginning of the senior year. In most cases, each student will work with a faculty member who serves as his or her honors adviser and assists with planning the honors research and thesis during the student's junior and senior years. The program may include a maximum of six courses in which the student works under the adviser's supervision. In some cases, students must pass a comprehensive examination given by the department in the senior year.

Students should check with the major department to obtain guidelines for the specific requirements for honors before the end of the sophomore year (although in some departments, applications for honors may be made in the second half of the junior year).

Admission to an honors program does not relieve students of any of the standard major requirements. A student's candidacy for honors will be terminated at the end of any term in which he or she has not maintained a standard of work satisfactory to the department. If candidacy is terminated for any reason, the amount of course credit to be allowed for honors courses will be determined by the College Board.

The department may recommend that a student graduate with honors, high honors or highest honors. Consult individual departments for details concerning acceptance into their honors programs.

University Honors

Each semester, the dean of the college publishes a list of students who have distinguished themselves by outstanding academic performance in the preceding semester. Honors are awarded to the top students in each class based on semester grade averages.

Upon graduation, Latin honors are awarded at three levels: cum laude, magna cum laude, and summa cum laude. Latin honors are based on the following cumulative grade-point averages: summa cum laude, 3.80 and higher; magna cum laude, 3.60-3.79; and cum laude, 3.40-3.59. Also, to be eligible for Latin honors, students must have completed at least 75 percent of their Clark courses with a letter grade.

Honor societies at Clark include the Society of Phi Beta Kappa, founded at the College of William and Mary in 1776 and dedicated to the recognition and encouragement of outstanding scholarly achievement in liberal studies. The Clark chapter, Lambda of Massachusetts, was established in 1953. Gryphon and Pleiades is the senior honor society at Clark. Its 12 members include students who have outstanding records of academic achievements and leadership in campus extracurricular activities. The Fiat Lux Honor Society was created in 1988 as a student honor and service society recognizing combined qualities of scholarship and citizenship among Clark juniors and seniors. Qualifications for selection include a minimum 3.3 grade-point average and significant community service.

Facilities

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Campus Libraries

The Robert Hutchings Goddard Library, named for the Clark physicist who invented the rocket technology that made space travel possible, is the academic heart of the University and an architectural landmark. Goddard is both a traditional and an electronic library with collections and services that are a combination of time-tested and brand new. The collections include more than 600,00 volumes, 300,317 monographs and subscriptions to 1,500 periodical titles. The library provides full Internet access and 70 end-user subject-specific databases. As a member of the Colleges of Worcester Consortium, Clark offers students the use of eight academic consortium libraries and a combined local collection of more than 3.5 million volumes.

Goddard Library also offers a viewing area for videocassettes; a listening area for compact discs, records and tapes; a language lab; computers; and terminals linked to the campus' computing network. Through the University Computing Center, the Library's menu of electronic information sources including the Public Online Catalog is available 24 hours a day.

The Guy Burnham Map and Aerial Photography Library, founded in 1921, is an active cartographic information center. The collection, global in scope, contains over 200,000 maps and 7,500 aerial photographs, as well as atlases, journals, globes, map reference materials and tourist information. A depository agreement with the U.S. Government Printing Office insures the availability of a full array of U.S. government maps. The library is located on the lower level of the Geography Building.

The Carlson Science Library, a branch of the Goddard Library, serves the disciplines of biology, chemistry and physics. Located on the top floor of the Sackler Sciences Center, it houses selected science journals and a research collection of recent monographs. Full Internet access, as well as subject-specific databases, are provided.

Information Technology

At Clark, information technology permeates all aspects of campus life. E-mail and Web systems provide online access to information, services, communications and collaboration. The high-speed campus data network links all campus buildings, including residence halls and the Internet; and wireless "hot spots" support laptop mobility around campus. Classrooms are networked and multimedia capable. Student computer labs provide access to specialized programs used in courses. Videoconferencing connects the campus to other locations, universities and laboratories. Walk up kiosks provide quick network access as individuals go about campus.

Clark students, faculty and staff routinely utilize the computing and networking environment in their day-to-day activities. Students register for classes and access their records through "Web for Students." Students, faculty and staff use e-mail for personal and University communications. The University's Intranet, known as Clark Commons, provides access to comprehensive campus information, services, directories and forums. Faculty and students utilize an online course management system, powered by Blackboard, to access course materials and participate in online discussions. Faculty and students use the multimedia resource lab to produce the multimedia content for their courses and other electronic communication vehicles. Select campus events are Webcast and archived for playback on demand. Student organizations initiate online discussions and "straw polls" on the Intranet forum, where any individual may participate.

Automated systems support the entire range of University administration and operations. Campus service departments offer information and access to services via the Clark Web site; and academic departments publish full descriptions of majors and programs along with faculty profiles.

All faculty and staff are provided with networked computers. Most students bring a computer to campus. Student computer labs and kiosks are also provided throughout the campus, supporting the curriculum and complementing students' personal ownership. Desktops and laptops; Windows and Macintosh; wired and wireless: all are supported. The University provides information and assistance to help students, faculty and staff acquire computers and software at the best prices. Consulting, troubleshooting and training are also provided, including evenings and weekends.

These systems and services, for which students are charged no extra fees, are provided to the Clark community by Information Technology Services.

Science Facilities

Clark's new science facilities include the Cathy '83 and Marc '81 Lasry Center for Bioscience, a 50,000 square-foot building for the biological sciences, and the renovated 32,000 square-foot former biophysics building, the second-oldest building on campus, which now houses physics, mathematics and computer science. The adjacent Sackler Sciences Center houses chemistry.

Special features of the project include:

- Research laboratories to support science faculty in their research with undergraduates and graduate students
- Flexible teaching laboratories to accommodate a variety of instructional approaches
- Laboratory support to allow significant shared equipment
- Classroom and seminar rooms that incorporate technology
- Offices near the laboratories to promote collaboration and collegiality

The Arthur M. Sackler Sciences Center links the biology, chemistry and physics departments and houses facilities for both teaching and research. Interdisciplinary programs, such as biochemistry and molecular biology, also are housed in Sackler. State-of-the-art scientific equipment, such as an electron spin resonance (ESR) spectrometer and high-field nuclear magnetic resonance (NMR) spectrometers, serve Clark students and researchers, as well as others in central Massachusetts. A centralized science library and computer laboratories also are housed here.

Visual and Performing Arts Facilities

The Traina Center for the Arts, which opened in August of 2002, is a state-of-the-art facility for the visual and performing arts. The complex consists of a completely remodeled late-19th-century brick school building of Richardsonian design with a newly built hall for lectures, recitals and screenings. Studios for painting, drawing and graphic design, together with a print-making studio, photography darkroom, exhibition gallery, visual resource library, multimedia center and high-tech classrooms, create an integrated environment for the study, creation, display and performance of studio art, art history, music, theater arts and film.

The Little Center Building houses primarily Theater and is devoted to the creation of theatrical performances and includes a black-box theater, experimental theater, costume shop, design workshop, practice studio and classroom. The building also includes a fully equipped sculpture studio.

Estabrook Hall contains additional facilities for the arts, including music classrooms, practice rooms, the George F. and Sybil H. Fuller Foundation Center for Music, and senior studios for advanced studio-art students.

Athletic Facilities

The Kneller Athletic Center includes the Hurst Courts, a gymnasium with three full-size courts for basketball and volleyball; a newly renovated six-lane 25-yard swimming pool with one- and three-meter diving boards; four racquetball courts and two squash courts; a weight room; a training room with facilities for rehabilitation; a dance room; plus locker rooms, offices and conference rooms.

The 4,300 square-foot James and Ada Bickman Fitness Center, an addition to the Kneller Athletic Center, provides students with a cardiovascular area as well as a strength and free-weight area.

Students play outdoor sports at Russ Granger Field. Recently renovated, the area consists of six lighted PlexiPave-surfaced tennis courts and a lighted sport-turf field for varsity field hockey, baseball and lacrosse, as well as a lighted natural-grass field for soccer. The fields are also used for intramural and recreational sports. Included in the renovations was the construction of the 29,850 square-foot Dolan Field House, which provides indoor practice space, a training room and locker rooms for visiting and home teams. The field house is also used for intramural and recreational use. O'Brien Field is the home to the varsity softball team.

Clark debuted its new cross country course in the fall of 2003 when the Cougars hosted the Worcester City Meet and the NEWMAC Championship. Located about 20 minutes from campus in the neighboring town of Boylston, Clark's challenging course is set within 269 acres of woodland, forest and community park land and includes a combination of wooded trails and open fields. The new course will be used to host dual meets and invitationals. The Donahue Rowing Center, one of the largest rowing facilities on the East Coast, is the home for the men's and women's rowing program. The teams practice and compete on Lake Quinsigamond, located approximately 10 minutes from campus and considered one of the best waterways for crew competition in the country. The lake has been the site of the New England Championships, the ECAC National Championships and the Eastern Sprints Regatta.

Student Resources

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Housing

Clark University provides housing for approximately 1,500 undergraduate students in eight residence halls and 14 houses. All first- and second-year students are required to live in University housing unless they are commuting from home. Residential Life and Housing staff is available to assist students with a variety of personal and academic concerns. The staff strives to create a living-and-learning environment through social, recreational and educational programs. Dodd Hall is designated as an all-women residence hall. The remaining eight halls are coeducational. All residence halls are smoke free. There are three residence halls designated exclusively for first-year students. Special-interest housing opportunities include a substance-free house (called Wellness House), quiet house and year-round house.

New student assignments are mailed by mid-July. Each year, returning students participate in the room selection process in April to select their rooms. Approximately, one-third of Clark students commute from home or live in private apartments in the immediate neighborhood. A limited listing of available apartments is compiled by and available at the Office of Residential Life and Housing.

Office of Intercultural Affairs

The Office of Intercultural Affairs (OIA) develops and implements educational and co-curricular programs designed to heighten cultural awareness, appreciation of cultural diversity, and intercultural understanding for all students. The OIA also provides programs specifically to serve the needs of international students, researchers, and faculty through immigration advising and cultural adjustment programs. The OIA staff advises more than 500 international students, faculty, scholars and their dependents from over 80 countries on matters relating to immigration as well as academic, social, financial and personal concerns related to daily life in the United States.

Academic Advancement

Clark University provides enhanced services for the ALANA community. At Clark University this acronym represents students of African, Latino/a, Asian, and Native American descent. The director of academic advancement assists students in the development and implementation of their academic and career goals. ALANA and first generation college students are invited to attend the ACE (Academic Clark Excellence) Summer Institute, which runs prior to first-year orientation. The ACE Summer Institute is designed to prepare them for the rigorous Clark experience and includes academic course previews, building a mentor network around leadership and academic relations, developing personal and social relationships with peers and understanding the community climate of Clark. ALANA students are also invited to participate in the Millennium Leadership Conference, a conference focusing on addressing the leadership development of ALANA students, slated for Nov. 2-4, 2007.

Army and Air Force ROTC

Clark University students may participate in Army and Air Force Reserve Officers' Training Corps at Worcester Polytechnic Institute. U.S. citizens, who are physically qualified, earn their degree from Clark University and satisfactorily complete the ROTC program, will be commissioned as second lieutenants in the U.S. Army or Air Force. Students may request an educational delay of active duty in order to attend graduate school. First-year and sophomore students can compete for two- and three-year scholarships, which are primarily based on academic performance and major. Students interested in Army ROTC should contact the Military Service Department at Worcester Polytechnic Institute (WPI). Students interested in Air Force ROTC should contact the Department of Aerospace Studies at WPI.

Health Services

The Clark University Health Service is a primary-care outpatient clinic that provides on-campus health care to full-time matriculated undergraduate students. It is staffed by physicians, nurse practitioners, registered nurses and support staff. The clinic, located at 501 Park Avenue, is open Monday through Friday, 9 a.m. to 5 p.m. There is always a physician on call when Health Service is closed.

Students may make an appointment at Health Service with a clinician for diagnosis, treatment, follow-up or counseling regarding health problems. Gynecological and contraceptive services are available.

Massachusetts law requires all full- and part-time students to enroll in a qualifying student health-insurance plan offered by the University or another health-insurance plan with comparable coverage. Failure to submit proof of comparable coverage will result in a student being automatically enrolled in the Clark plan and charged accordingly. In compliance with state law, students may not register for classes until they are enrolled in an insurance plan.

Dean of Students Office

The Dean of Students Office is concerned with the well-being of students living and learning in a community of scholars and works to maximize the quality of student life at Clark. The staff coordinates services related to housing, residential life, intercultural-student services, international-student services, new-student orientation, wellness, health services, student activities, personal counseling and judicial affairs.

The deans are available to meet with students on the wide variety of issues that they encounter during their time at Clark. The Dean of Students Office publishes a student handbook (Synergy), which outlines student support services and the Code of Student Conduct.

Career Services

The Career Services Office provides services and programs to assist students in making informed decisions regarding their career choices. Our professional staff offers assistance in career and graduate-school planning and in the internship and full-time job search. The following services and resources are available:

Career Advising—Staff is available to meet with students who want to discuss their choice of major and/or career and graduate-school plans. Career advising helps students clarify their goals, preferences, skills and interests.

Career-Planning Events—Workshops are conducted each semester on topics such as resume writing and interviewing skills as well as a variety of panel presentations on specific career fields. Job fairs and graduate-school events are also coordinated to provide students with the opportunity to network.

Career Resources—The Career Services Library contains information on career fields, internships, jobs and graduate study. Books and articles on specific job-search strategies are also available.

Clark Career Exploration Program—CCEP is a four-year comprehensive program where students discover their interests and skills, explore a variety of possible career paths and their requirements, and develop plans for internships, full-time employment, graduate and professional school. Through this program, students are encouraged to attend career workshops and create portfolios that creatively market their liberal-arts education to employers and/or graduate schools.

Internship Program—Career Services encourages students to participate in academic experiences in the field, allowing them to compare academic theory to actual practice while exploring various career options. Students may earn academic credit while working with many public, private and nonprofit organizations located throughout the county.

Letters of Reference Files—Career Services has partnered with Interfolio.com, an online letter-of-reference and credential-management service. For a small annual fee, students may have letters sent to the site where they will be housed until needed for employment or graduate school.

Prelaw Advising—The Prelaw Advising Program provides services to undergraduates considering careers in law and facilitates the entrance of qualified students into law school. The program, coordinated by Career Services, sponsors workshops, lectures and meetings, and provides informational materials for students. Watch appropriate bulletin boards and publications for announcements of important meetings and events. Students interested in pursuing law-school admission should contact Career Services or Professor Mark Miller in the Government and International Relations Department.

Recruiting Program—Clark students can connect with employers through on-campus company presentations, showcases, resume referrals and campus interviews. Career Services currently utilizes eRecruiting, a premiere Web-based recruiting system. All students are encouraged to create their profiles and register to begin their career exploration.

The Career Services Office is located on 122 Woodland Street and is open Monday through Friday from 8:30 a.m. to 5 p.m. For more information, call 508-793-7258; e-mail careers@clarku.edu; or visit the Web site at www.clarku.edu/offices/career.

Community Engagement

The Community Engagement and Volunteering (CEV) Center is the first stop for students, faculty and staff looking to get involved and "Make a Difference" in the Worcester community. By engaging in meaningful community service, students can make a positive difference in the lives of others, gain leadership skills, learn the value of civic responsibility, and experience the richness and diversity of the Worcester community.

The CEV Center maintains a comprehensive database of community agencies, volunteer needs and service opportunities. The staff works closely with faculty to develop and implement community-based learning courses. The CEV also advises and works with several student groups that are active in the Worcester community, including the Making a Difference Scholars.

Throughout the year, the CEV organizes many community-oriented events and forums for the Clark community, including the Volunteer Fair, Food for Thought dialogue series, and Just Do It Day. To get involved, visit the CEV Center on the first floor of Corner House between the hours of 9 a.m. and 5 p.m., Monday through Friday.

For more information, call (508) 421-3785, e-mail cev@clarku.edu or visit www.clarku.edu/community/volunteer/.

Campus Security

The Clark University campus is served by a 12-member police force duly appointed by the Commonwealth of Massachusetts department of State Police. University Police are armed and have full arrest and policing powers.

Police take a proactive approach to campus security, offering students, faculty and staff educational programs on how to take precautions appropriate to an urban setting. University Police and Physical Plant maintain a network of 61 indoor and outdoor emergency telephones to ensure a quick response to security concerns. An escort service is available for students from 4 p.m. to 4 a.m. during the academic year within a quarter mile of the Clark campus. Clark University, as mandated by federal law, reports annually on the security of its campus. A copy of the Campus Security Report is available at Admissions House, University Police and on Clark's Web site.

Varsity Athletics

Clark's 17 intercollegiate varsity teams compete as a member of the Division III National Collegiate Athletic Association (NCAA), the Eastern College Athletic Conference (ECAC) and the New England Women's and Men's Athletic Conference (NEWMAC), which includes Babson College, Massachusetts Institute of Technology, Mount Holyoke College, Smith College, Springfield College, United States Coast Guard Academy, Wellesley College, Wheaton College and WPI. Clark lacrosse participates in the Pilgrim League, which includes Babson, Lasell, MIT, Massachusetts Maritime, Norwich, Springfield, Wheaton and Western New England.

Men's varsity sports include baseball, basketball, cross country, lacrosse, rowing, soccer, swimming and diving, and tennis. The women's varsity sports include basketball, cross country, field hockey, rowing, soccer, softball, swimming and diving, tennis, and volleyball. For more information, visit www.clarku.edu/athletics.cfm.

Graduate Program and Research Institutes

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Founded in 1887 as the first all-graduate school in America, Clark has continued to offer outstanding master's and doctoral degree programs in the context of an intimate university. Over the years, Clark's graduate school has been at the center of major research breakthroughs in disciplines as diverse as physics, geography and psychology.

Clark offers graduate programs leading to doctoral and master's degrees. Admission to Clark's graduate programs is open to holders of the bachelor's degree or its equivalent, and is determined on a competitive basis. All programs are administered by the Graduate Board. Completion of a master's degree program generally requires one or two years of study, and completion of the Ph.D. requires at least four years of study, although requirements vary across departments.

Doctor of Philosophy degrees are offered in biology, chemistry, economics, geography, history, physics and psychology. Master of Arts degrees are offered in community planning and development, education, English, environmental science and policy, geographical information science, international development and social change, and teaching. The Master of Business Administration and Master of Science in Finance are offered by the Graduate School of Management. The College of Professional and Continuing Education offers the Master of Public Administration, Master of Science in Professional Communication, and Master of Science in Information Technology.

There is a wide variety of financial support available for incoming graduate students. Most departments offer teaching assistantships, fellowships and research assistantships. Often these come with a stipend as well as tuition grants. Some specific examples of fellowship awards are listed at the end of this section.

Inquiries and Admission to Graduate School Programs

Inquiries from both U.S. and international students concerning specific programs of graduate and postdoctoral work should be addressed to the chair of the department or program concerned. Visit www.clarku.edu/gradadmissions for more information.

Admission to the graduate school may be granted only by the dean of graduate studies and research, acting for the Graduate Board on the recommendation of a department or program of the University. Formal notification is by official letter from the graduate dean. Applicants should communicate with the appropriate department or program head. The applicant will be provided with an application form, which, accompanied by a $50 application fee, should be returned to the department or program. In addition, the applicant should arrange to forward an official transcript of all undergraduate and any subsequent academic work as well as three letters of recommendation from persons who are competent to judge qualifications for graduate study.

Department or program heads may request the submission of additional material, and most require a record of attainment in the Graduate Record Examination given by the Educational Testing Service, Princeton, N.J. All applicants are urged to submit their scores on the Graduate Record Examination verbal, quantitative and advanced tests. Applicants to the Graduate School of Management programs are required to take GMAT rather than GRE examinations.

In addition to an application and $50 fee, foreign students should provide a certified English translation of official transcripts, evidence of English proficiency (TOEFL), at least three letters of recommendation, and a statement concerning their financial resources or agency support.

Application deadlines vary by department. Please contact the department or program of interest for the date.

Admission to the Graduate School is valid for a specified time only and lapses after that period. If a student is admitted while still a candidate for a degree from another institution, an updated transcript noting the conferring of that degree must be sent directly to the department or program of interest.

Part-time graduate study is possible in some departments. Admission as a special graduate student (nondegree candidate) is a simple enrollment process handled through the Office of Student Records.

Master of Arts

Master of Arts degrees are offered in the fields of community planning and development, education, English, environmental science and policy, geographic information sciences for development and environment, international development and social change, and teaching.

Residency: An academic year (generally eight course units) of study in residence is a minimum requirement for a master's degree. Individual departments or programs may require longer periods of residency.

Foreign Language: Language or other special requirements are included in the department listings in this catalog.

Course and Examination Requirements: Each student must complete at least eight course units in a program approved by the department. One course may be a research course devoted to the preparation of the thesis. Credit for a maximum of two course units at another institution may be approved by the dean of graduate studies and research upon recommendation of the department.

Thesis: The thesis is written on a topic in the field of the student's special interest under the supervision of a member of the department and in a style, length and format that is appropriate to the problem being researched. Regulations for submission of theses are available online at www.clarku.edu/graduate.

Graduation Fee: The fee for the Master of Arts is $100. This covers the cost of the diploma and binding of the library copy. It is payable when the thesis is deposited with the format adviser. Students who do not write a thesis must pay this fee no later than the date on which theses are due to the University format adviser.

Nonresident Students: Students who have completed all their in-class course work and are finishing their degree requirements off campus must continue to register each semester until graduation as nonresident students. The nonresident student status fee is $200 each semester for the first three years and $400 each subsequent semester (summers excluded).

Postgraduate Programs in COPACE

Through the College of Professional and Continuing Education (COPACE), Clark offers the Master of Public Administration (M.P.A.), Master of Science in Professional Communication (M.S.P.C.) and Master of Science in Information Technology (M.S.I.T.).

The M.P.A. program is designed to strengthen and advance the managerial and analytical skills of mid-career managers and executives in public organizations and nonprofit institutions. The M.S.P.C. is a comprehensive, practical program designed to enhance communication skills and managerial techniques through courses designed specifically for mid-career professionals. The M.S.I.T. is designed to prepare professionals to take a holistic approach; think critically about enterprise objectives; learn the strengths and weaknesses of each technology and how they interface; and envision the totality of e-based systems. For further information, contact the College of Professional and Continuing Education.

Certificate of Advanced Graduate Study (CAGS)

Through COPACE, Clark offers a Certificate of Advanced Graduate Study (CAGS) in Interdisciplinary Studies, designed for teachers, administrators and other professionals. The program is open to those already holding a master's degree. Although increased specialization in a student's particular area is possible through the chosen concentration track, the Clark Interdisciplinary Studies CAGS, unlike traditional CAGS offered elsewhere, attempts to foster breadth beyond a discipline. Courses are chosen from several disciplines; the student's focus is interdisciplinary, incorporating and transcending established domains of study.

Master of Business Administration and Master of Science in Finance

The accredited Clark University Graduate School of Management offers programs leading to the Master of Business Administration (M.B.A.) and the Master of Science in Finance (M.S.F.).

Doctoral Programs

Doctor of Philosophy degrees are offered in biology, chemistry, economics, geography, history, physics and psychology. Only well-qualified candidates with proven ability in their special fields of study will be encouraged to proceed to the degree of Doctor of Philosophy.

Residence: The minimum requirement is one year of full-time study (eight course units) beyond the M.A. or its equivalent in part-time work, in residence. If the Master of Arts has been earned at Clark, this requirement is in addition to the residence requirement for that degree.

Foreign Language: Each graduate department sets its own language or related requirements as the student's field of research may demand and must report such requirements in each case to the dean of graduate studies and research. If a language is required, either a testing service or on-campus tests are employed at the discretion of the department.

Preliminary Examination: Upon completion of preparation in the fields of study, a prospective candidate takes a preliminary examination set by the major department. This examination may be written or oral, or a combination of both. The chair of the department may invite other scholars from within or outside the University to participate in the examination.

Dissertation: A dissertation, which is expected to make an original contribution to a specialized field of knowledge, is required of each candidate. The dissertation, approved by the chief instructor or dissertation committee, is presented to the examining committee at the final oral examination. An abstract of the dissertation, not exceeding 350 words, is approved by the dissertation advisers. Four weeks before the degree is to be conferred, a presentation-quality copy of the dissertation, together with two official title pages, an academic history and an abstract must be delivered to the University format adviser. At the same time, one or more copies of the dissertation and of the abstract may be required by the major department. The title pages and academic history forms can be obtained online. The presentation-quality copy of the dissertation must be computer printed as prescribed in the format guide located on the Graduate School Web site.

The dissertation becomes part of the permanent collection in the University library. A microfilm copy of each dissertation is made by Bell & Howell of Ann Arbor, Mich., and is available for duplication on request to that company. The abstract is printed in Dissertation Abstracts.

Articles published in referred journals may be accepted in lieu of a dissertation with the approval of the department and the graduate dean.

Graduation/Diploma Fee: The fee for the Doctor of Philosophy is $150. It covers the cost of the diploma, hood, publication of the abstract in Dissertation Abstracts, and binding of the library copy of the dissertation. It is payable when the dissertation is deposited with the University format adviser.

Nonresident Students: Students who have completed all their in-class course work and are finishing their degree requirements off campus must continue to register each semester until graduation as nonresident students. The nonresident student status fee is $200 each semester for the first three years and $400 each subsequent semester (summers excluded).

Graduate Grading Policies

The grades of A and B (with "+" and "–") are acceptable for graduate credit; anything lower than a B- is not acceptable. A Pass/Fail grading option is possible, where P (pass) signifies that the student has performed at a B– or above. Incompletes are awarded at the discretion of the instructor for a period not exceeding one year.

Graduate Housing

A limited number of on-campus housing spaces are available through the Office of Housing and Residential Programs. Incoming students have priority for this housing. Further details may be obtained from the Office of Housing and Residential Programs or from academic departments.

Off-campus rooms and apartments for both men and women are available in the immediate area of the University. A limited listing of current housing opportunities is compiled by the Office of Housing and Residential Programs. Students without prior arrangement for University-owned housing are urged to arrive before registration to seek suitable housing in the area.

For information on meal plans, health insurance and health services, please refer to the section on Facilities and Student Resources.

Graduate Tuition and Other Charges for Academic Year 2007-2008

Full-time Graduate Students:

Tuition is $32,600 per academic year (or $16,300 per semester)

In departments that define a full load as four courses per semester, the per-course charge is $4,075. The per-course charge varies in some departments according to their specific definition of a full program. Students should contact their department chairs to find out which scale applies.

Part-time Graduate Students:

Tuition is charged on a per-course basis according to the scale used in the student's department (generally $4,075 per course).

Tuition for special graduate students (nondegree candidates): $4,075 per course

Tuition and fees differ in the following programs:

- Master of Business Administration
- Master of Science in Finance (Contact the Graduate School of Management for further details.)
- Master of Public Administration
- Master of Science in Professional Communication
- Master of Science in Information Technology (Contact the College of Professional and Continuing Education for further details.)
- Master of Arts in Teaching
- Master of Arts in Urban Education and Teacher Research

Other Fees

Graduation Fee—payable at the time the thesis or dissertation is deposited with the Office of the Graduate School.

Master's degrees	$100
Doctoral degrees	$150

Students who do not write a thesis or dissertation, including those receiving the degree through an alternative program, must pay this fee no later than the date on which theses are due to the University format adviser (generally, April 1).

Nonresident Fee variable

Payable July 24 and Dec. 15: $200 each semester for first three years; $400 each subsequent semester (summer excluded).

Loan Deferment

Only students enrolled on at least a half-time basis are eligible for student deferment status on college loans. Nonresident graduate students on a half-time basis are limited to two years of student deferment status.

Graduate Scholarships, Fellowships and Assistantships

Graduate fellowships and scholarships are provided for well-qualified students by the University from endowed funds and from other sources. Financial aid to graduate students also is available in the form of grants from a number of special funds and, in some departments, from sponsored research grants. Students who receive awards must obtain permission from the department before accepting employment. Application for a scholarship or fellowship to begin in September should be made before Feb. 15 to the department chair or director of the program in which the applicant expects to do major work. Late applications, after endorsement by the department, go to the dean of graduate studies and research for final approval.

Research Fellowships

These fellowships may be awarded to graduate students who have fulfilled their residence requirements and who are pursuing a full-time doctoral program on campus.

Teaching Assistantships

Teaching assistants, generally only offered to doctoral students, are assigned a variety of duties according to the needs of the department. Responsibilities include conducting discussion sessions, supervising laboratory sections, holding tutorial sessions and grading papers and projects. Assistantships typically involve a commitment of approximately half time (an average of 17-1/2 hours a week). A tuition-remission scholarship or fellowship accompanies this award. Additional support up to a 12-month stipend is available in some departments.

Assistantships

Assistantships are available in several departments. Assistantships involve a variety of services, including research with appropriate stipends, and usually provide the student with experience that will be useful in later professional work.

Graduate Fellowship, Scholarship and Department Funds

Stipends for fellowships and scholarships are provided by endowed funds. For further information about these funds, contact the Graduate School Office.

Research Centers

The Strassler Family Center for Holocaust and Genocide Studies

The Strassler Family Center for Holocaust and Genocide Studies provides vital national and international leadership in educating future generations of scholars. The center, in conjunction with Clark's history department, offers North America's first Ph.D. program specifically in Holocaust history and genocide studies. Clark also offers the richest interdisciplinary undergraduate program in Holocaust and genocide studies in the country. It includes courses in history, literature, psychology, government and sociology. A special feature of this program is the May Term in Prague and Terezin in the Czech Republic and Auschwitz, Poland, which, every other year, brings a group of Clark undergraduates to Central Europe for an intensive three-week course that includes visits to key Holocaust historical sites.

Clark is the first college or university anywhere to have two occupied fully endowed, full-time tenured professorships in Holocaust history, as well as a professorship dedicated to the study of the Armenian genocide.

George Perkins Marsh Institute

The George Perkins Marsh Institute was founded in 1991 to promote and conduct collaborative and interdisciplinary research on human-environment relationships that cover a wide range of research themes including risks and hazards, the human dimensions of global environmental change, resource and environmental policy, industrialization and globalization, and the development and application of Geographic Information Science across multiple disciplines.

The institute fosters team-based research that engages graduate students and research faculty in problem formulation and resolution. By galvanizing research of this kind within Clark University, its surrounding community and beyond, the institute affords its research faculty and students the opportunity to engage in a scale, scope and quality of research that would not be possible otherwise, thus helping to extend Clark's research activities around the world.

The institute is comprised of four centers: CENTED, which contains the Community Based Development Program (CCBD) and the Community Based Hazard Management Program (CBHM); Clark Labs; the Greening of Industry Network; and the newly formed Center for Risk and Security (CRS).

- Founded in 1978, the **Center for Technology, Environment and Development (CENTED)** is internationally recognized as one of the oldest and most prominent centers for the study of natural and technological hazards in the United States. Interdisciplinary research has always been CENTED's forte, ranging from theoretical work on hazard analysis, hazard taxonomies, vulnerability, environmental equity, comparative risk assessment and risk perception to more applied work on risk communication, radioactive-waste management, public participation, corporate risk management, cancer and noncancer health risks, occupational risks, hazardous-waste transportation, and emergency planning. CENTED researchers have also maintained an interest in practical issues relating to the University and the surrounding Worcester community.

  CENTED continues its traditional work on risks and hazards with projects funded by various agencies, such as the EPA, NIEHS and the Department of Energy (DOE), that look at the effect of exposure to toxic substances on birth weight, developing methodologies for assessing uncertainty and variability of human response to exposures to hazardous substances and vulnerability studies.

- **Clark Labs for Cartographic Technologies and Geographic Analysis (Clark Labs/IDRISI Project)** is dedicated to the research and development of geospatial technologies to address the needs of effective and responsible decision making for environmental management, sustainable resource development and equitable resource allocation. Clark Labs is best known for its flagship product, IDRISI GIS and Image Processing software, which it continues to develop and distribute. Since its inception in 1987, over 35,000 organizations and individuals have been licensed to use the software in more than 175 countries. IDRISI provides unprecedented tools for multicriteria and multiobjective decision making, environmental change and time series analysis, land-cover change, change prediction and analysis of ecological implications dynamic modeling, risk and uncertainty management, and soft classification of remotely sensed imagery. Clark Labs also engages in limited applications research. Projects have ranged from the detection of diseased trees using hyperspectral imagery and the predictive modeling of invasive species using neural networks, to the spatial and temporal analysis of climate cycles (El Nino/La Nina), to vulnerability in contexts as varied as landslides and droughts. Clark Labs has also had a strong involvement in the transfer of GIS technology, particularly in the context of the developing world.

- The Marsh Institute hosts the America's office **Greening of Industry Network (GIN)**. GIN is an international organization dedicated to accelerating progress toward a sustainable society. The America's office works in cooperation with two other GIN programs, GIN-Asia at Chulalongkorn University in Thailand, and GIN-Europe at the University of Twente in the Netherlands. Network members work in many fields and come from many countries. Founded in 1991, GIN members work to develop knowledge and transform practice to accelerate progress toward a sustainable society, and seek to create new concepts and a new language that will make it possible to extend our horizons and communicate across disciplines, nations and sectors.

- The newly formed, **Center for Risk and Security (CRS)** conducts in-depth studies of homeland security issues using a risk-analysis perspective. The center's broad range of security issues includes terrorism, disaster management, law and human rights, resource allocation, critical infrastructure, social dimensions of risk, and international trade security. CRS's purpose is to adapt and develop risk and decision methods for analyzing these issues, conduct critical reviews of existing security plans, and assist private and governmental entities in planning and policy development. The domain of effort for the center includes expanding the scope of risk assessments to include security issues; developing methods to evaluate the trade-offs inherent in decisions about security, examining human-response aspects of planning and design of security programs, and assuring that democratic values and institutions are utilized in security planning.

- The **Jeanne X. Kasperson Research Library** offers one of the most extensive collections in North America of research materials on natural and technological hazards and environmental change. The library's collection, developed over the past two decades, now houses more than 20,000 volumes, including books, technical reports and government documents. Approximately 50 percent of the collection is bibliographically retrievable via the Internet, and the remainder is retrievable on site via internal databases. Holdings also include in excess of 1,500 hearings and reports of the U.S. Congress, 600 reports of the U.S. General Accounting Office, and over 2,000 specific articles on development. In addition, the Library receives some 300 journals, newsletters and other periodicals. The Jeanne X. Kasperson Research Library also regularly obtains and catalogs a wide range of publications on relevant subjects from international, national and subnational institutions.

Majors, Minors and Special Programs

Bookmark it! www.clarku.edu/catalog

For the most up-to-date academic catalog information, visit Clark's online catalog at www.clarku.edu/catalog. This user-friendly online version of the academic catalog is updated before each registration period with the latest information and descriptions of new courses. Plus, you can easily link from the online catalog to faculty bios, program Web pages and other expanded information.

Helpful Information

Undergraduate-Level Courses are numbered 001-299.

Graduate-Level Courses are numbered 300 and above.

Course Descriptions are listed in the course's home program/department. The following key lists Clark's course prefix codes (letter codes) and the corresponding home program/department that you should reference for the course description. For example, the course description for FREN101 Elementary French can be found in Foreign Languages and Literatures.

Course Code Prefixes and corresponding home program/department

ACCT	Management
ARTH	Art History and Criticism
ARTS	Studio Art
AS	Asian Studies
ASTR	Physics
BCMB	Biochemistry and Molecular Biology
BINF	Bioinformatics
BIOL	Biology
CHEM	Chemistry
CHIN	Foreign Languages and Literatures (Chinese)
CLAS	Ancient Civilization
CMLT	Comparative Literature
COM	Management
COMM	Communication and Culture
CSCI	Computer Science
ECON	Economics
EDUC	Education
EN	Environmental Science
ENG	English
ENT	Innovation and Entrepreneurship
FIN	Management
FREN	Foreign Languages and Literatures (French)
GEOG	Geography
GERM	Foreign Languages and Literatures (German)
GES	Geography (Global Environmental Science)
GOVT	Government and International Relations
HCM	Management
HEBR	Foreign Languages and Literatures (Hebrew)
HIST	History
ID	International Development and Social Change, IDCE
IDCE	International Development, Community and Environment (IDCE)
IDND	Interdepartment; No department
JAPN	Foreign Languages and Literatures (Japanese)
JS	Jewish Studies
LAS	Law and Society
LAT	Foreign Languages and Literatures (Latin)
MKT	Management
MATH	Mathematics
MGMT	Management
MIS	Management
MUSC	Music
OM	Management
PHIL	Philosophy
PHYS	Physics
PSTD	Peace Studies
PSYC	Psychology
RER	Race and Ethnic Relations
SCRN	Screen Studies
SOC	Sociology
SPAN	Foreign Languages and Literatures (Spanish)
STAT	Management
TA	Theater Arts
UDSC	Urban Development and Social Change
WS	Women's and Gender Studies

ANCIENT CIVILIZATION

Program Faculty

Paul Burke, Ph.D. – *Chair*
Everett Fox, Ph.D.
Michael Pakaluk, Ph.D.
Rhys Townsend, Ph.D.

Program Overview

The program in ancient civilization consists principally of courses in art history, classics, Jewish studies and philosophy. This interdisciplinary program covers the entire spectrum of ancient Mediterranean culture including Greek, Hebrew and Latin languages. By combining art history, Jewish studies and philosophy with what has been traditionally identified as classics (Greek and Latin language and literature), the Clark program in ancient civilization presents established disciplines in a stimulating and original configuration.

Undergraduate Requirements

The purpose of the major is to supply students with a sound knowledge of the ancient Greco-Roman and Judaeo-Christian roots of Western civilization. Majors are expected to acquire a working knowledge of at least one of the principal languages of the ancient Mediterranean (Classical Greek, Hebrew or Latin); this ensures direct access to the culture, literature, philosophy and history of the ancient world. Majors are also eligible to apply for admission to the Intercollegiate Center for Classical Studies in Rome, where they can spend a semester studying classical literature and archaeology.

To graduate as an ancient civilization major, a student must earn a grade of C– or better in at least 10 courses in ancient civilization. These courses must include:

1. At least two courses, from different departments, from among this group of foundation courses:
    ARTH110 Ancient Greek Art
    CLAS111 Roman Art and Architecture
    CLAS121 Introduction to Greek Culture
    HIST174 The Jewish Experience
    PHIL141 History of Ancient Greek Philosophy
2. At least one semester course at or above the intermediate level (language 103) in Greek, Hebrew or Latin.
3. A one-semester senior seminar, to be taken preferably during the second semester of the senior year, including a major research paper, arranged in consultation with at least two members of the program faculty by the end of the junior year.

Ancient Civilization Minor

An interdepartmental minor in ancient civilization consists of a total of six courses listed below, or other courses approved for the minor by program faculty. These courses must include:

1. At least two courses, from different departments, from the group of foundation courses listed under "Undergraduate Requirements."
2. At least two 200-level courses.

Students minoring in ancient civilization are strongly encouraged (but are not required) to study Latin, Greek or Hebrew for their remaining two courses.

Courses

ARTH106 Introduction to Archaeology
See Art History 106.

ARTH109 Classical Myth and the Greek
See Art History 109.

ARTH110 Ancient Greek Art
See Art History 110.

ARTH114 Ancient Cities and Sanctuaries
See Art History 114.

ARTH215 The Temple Builders: Architecture in Ancient Greece
See Art History 215.

ARTH219 Seminar in Ancient Art: Portraits and Representation in the Ancient World
See Art History 219.

CLAS111 Roman Art and Architecture/Lecture, Discussion
Surveys artistic and architectural accomplishments of ancient Rome and the Roman Empire, beginning with the origins of Rome in Bronze Age central Italy. Studies Roman relations with Etruscans, Greeks and other non-Latin-speaking peoples as manifested in Roman art and architecture. Examines effects of Judaeo-Christian values on the formerly pagan Empire, appearance of a Christian Roman government and development of distinctively Christian forms of Roman art and architecture. Mr. Burke/Offered periodically

CLAS124 Introduction to Classical Mythology/Lecture, Discussion
Studies English translations of ancient Near Eastern, Greek and Roman literary text (along with some modern ones) to understand the function of myth in Greco-Roman antiquity as a vehicle for artistic communication and social commentary. Emphasizes influence of ancient mythology on later European culture, especially literature and art. Includes slide illustrations. Mr. Burke/Offered every other year

CLAS150 Jerusalem in History and Imagination/Lecture, Discussion
See Jewish Studies 150.

CLAS222 Jesus, History and the Apocalypse/Lecture, Discussion
Studies the many aspects of the "historical Jesus" issue. What can be known with certainty about Jesus of Nazareth? What do we know with reasonable historical confidence? How does one evaluate, as a historian, ancient texts (the canonical and noncanonical Gospels, among others), which supply inconsistent accounts and which make religious claims not subject to historical analysis? The course also focuses on the historical context of Jesus, as a first-century Palestinian Jew under Roman authority. Mr. Burke/Offered every other year

CLAS262 Jews and Christians in the Ancient World
A historical and cultural survey of the complex and tumultuous period between foundations of the Roman Empire and the sixth century A.D., when medieval culture was established in Europe. Studies the struggle between pagan or classical modes of thought and Judaeo-Christian beliefs and values, and the assimilation of each in the other; and the tension within the Christian movement between spiritual and practical concerns as the new religion came to dominate Western culture. Mr. Burke/Offered every other year

CLAS267 Religious Experience in the Ancient World/Lecture, Discussion
Studies religious experience available to people of the ancient Mediterranean from approximately the time of Homer to the official acceptance of Christianity by Roman Imperial government. Includes: nature of polytheist gods, prophecy and oracles, conversion and spread of religious belief, Jewish and Christian monotheism, evil in ancient religious thought and the rise of Christianity. Mr. Burke/Offered every other year

GRK101 Introductory Greek I, II/Lecture, Discussion
See Greek 101.

GRK299 Supervised Reading in Philosophical Greek
See Greek 299.

LAT101 Introductory Latin
See Latin 101.

LAT103 Intermediate Latin
See Latin 103.

LAT299 Supervised Reading in Philosophical Latin
See Latin 299.

BIOCHEMISTRY AND MOLECULAR BIOLOGY

Program Faculty

David Thurlow, Ph.D. - *Director*
Donald Crampton, Ph.D.
Frederick Greenaway, Ph.D.
David Hibbett, Ph.D.
Shuanghong Huo, Ph.D.
Denis Larochelle, Ph.D.
Noel Lazo, Ph.D.
Thomas Leonard, Ph.D.
Timothy Lyerla, Ph.D.
Deborah Robertson, Ph.D.
Justin Thackeray, Ph.D.

Emeriti Faculty

John Brink, Ph.D.

Program Overview

The biochemistry and molecular biology program offers an interdisciplinary major that draws on the faculty and course resources of the departments of Biology and Chemistry. Designed to provide students with an in-depth exploration of an area of science that is perhaps the most exciting and actively growing of any today, the program is suitable for students who want to pursue graduate studies in the area; enter medical school with a strong background in basic science; or take laboratory or other science-related positions after graduation. Those wishing to major in biochemistry and molecular biology must select an adviser within the program and file a plan of study with the program director.

Undergraduate Requirements

Students first obtain a solid grounding in biology, chemistry, physics and calculus and then take biochemistry, a yearlong course sequence that covers our current understanding of the field. After that, there is a choice between two tracks, or alternative ways to complete the major, depending on the individual's interests. Students must also demonstrate competence in communicating biochemical concepts (e.g., through reports based on research in the scientific literature, Academic Spree Day presentations, directed-study papers, honors thesis, or publications), and take the American Chemical Society standardized exam (either as part of a course requirement, or as a separate assessment of their understanding of the body of knowledge in biochemistry and molecular biology.

The core curriculum consists of the following required courses:

- Introduction to Calculus (MATH120 and 121 or 124 and 125)
- Introduction to Physics (PHYS110 and 111 or 120 and 121)
- Introductory Chemistry (CHEM101 and 102)
- Introduction to Biology (BIOL101 and 102)
- Genetics (BIOL118)
- Cell Biology (BIOL137) or Microbiology (BIOL109)
- Organic Chemistry (CHEM131 and 132 or 134)
- Biophysical Chemistry (BCMB264)
- Biochemistry I and II (BCMB271 and 272)

The student will also complete one of the following two groups of courses, emphasizing either biochemistry or molecular biology.

Courses required for the biochemistry track:

- Bioanalytical Chemistry (BCMB144)
- Protein Chemistry (BCMB275) or Natural Products (CHEM235)

Courses required for the molecular biology track:

- Molecular Genetics (BCMB228)
- Recombinant DNA (BCMB231)

Students must also complete two additional courses related to biochemistry and molecular biology, which do not satisfy requirements for other majors. This requirement may be satisfied with any of the program offerings, a directed-research course, any biology or chemistry course in the list above (and not already used to fulfill a requirement), or other biology or chemistry courses approved by the adviser.

Honors Program

A student interested in the honors program should contact the program faculty member with whom the student would like to do research and then apply in writing to the program director for admission. A "B" average is required. In addition to the program requirements, honors candidates must:

- Carry out a research project under the supervision of a faculty member in the biochemistry and molecular biology program.
- Submit an honors thesis or publication based on the research project.
- Present the research results in a public seminar.

Students are encouraged to begin their research in the summer following the junior year, if not earlier.

Biochemistry and Molecular Biology Minor

The requirements for a minor in biochemistry and molecular biology are:

- BCMB271 Biochemistry I and BCMB272 Biochemistry II
- Two additional related courses, neither of which may be used to satisfy requirements for other majors, minors or concentrations.

Courses

BCMB109 MICROBIOLOGY/LECTURE, LABORATORY
See Biology 109.

BCMB144 BIOANALYTICAL CHEMISTRY/LECTURE, LABORATORY
Presents both theoretical and practical aspects of quantitative analysis as they apply to biological macromolecules – proteins and nucleic acids. Topics include statistical procedures for evaluating analytical data; equilibrium theory; titrimetric, spectroscopic and electrochemical methods of analysis; chromatographic and electrophoretic methods; and kinetics methods of analysis. The laboratory component of the course will emphasize accurate and precise data collection and various computational approaches to data analysis. A significant portion of the laboratory phase of the course will be devoted to carrying out a group research project, such as the isolation and partial characterization of a new protein from a novel biological source. Prerequisite: BCMB271. Staff/Offered every other year

BCMB228 Molecular Genetics/Lecture, Seminar
Explores recent discoveries in the molecular genetics of prokaryotes and eukaryotes, with emphasis on new findings related to catalytic activities of RNA. Topics include: protein synthesis, RNA transcription, gene regulation, RNA splicing, catalytic RNA and origins of living systems. Intended primarily for seniors and graduate students. Prerequisite: BCMB271 or BIOL118 or permission of instructor. Mr. Thurlow/Offered every year

BCMB231 Recombinant DNA/Lecture, Laboratory
See Biology 231.

BCMB252 Bioinorganic Chemistry/Lecture
Discusses the chemistry of metals in biological systems and models of these systems. The introductory material introduces general principles and theories of biochemistry and inorganic chemistry, as well as metal ion and drug transport in biological systems. This is followed by an introduction to physical techniques used in studying metalloproteins. The major part of the course discusses the application of these principles and methods to a wide range of metallobiological systems. Prerequisite: permission of the instructor. Mr. Greenaway/Offered periodically

BCMB264 Biophysical Chemistry/Lecture, Laboratory
Emphasizes the physical chemistry of biological macromolecules—proteins and nucleic acids. Covers the basic laws of thermodynamics, molecular thermodynamics (including aspects of modeling macromolecular structure, molecular mechanics and molecular dynamics simulations), statistical thermodynamics, x-ray and NMR structure determination, light scattering by macromolecules, kinetics quantum mechanics and spectroscopy, and solution behavior of macromolecules. The laboratory sessions are split between “wet” macromolecular chemistry and computational projects. Prerequisite: BCMB271, MATH121, 125 or permission of instructor. Mr. Lazo/Offered every other year

BCMB271 Biochemistry I/Lecture, Laboratory
A comprehensive survey of biochemistry and molecular biology, including protein structure, enzyme kinetics, membrane structure, DNA structure, replication, transcription and translation. The laboratory introduces basic techniques including safe use of radioisotopes, isolation of proteins, purification of enzymes, enzyme kinetics, gel electrophoresis, column chromatography and DNA isolation and characterization. Prerequisite: CHEM101/102; BIOL100, 101 or 103 and 102; and CHEM131 (or permission). Mr. Crampton, Mr. Thackery/Offered every year.

BCMB272 Biochemistry II/Lecture
A comprehensive survey of the carbohydrates, energy metabolism and metabolic biochemical pathways. Topics include glycolysis, TCA cycle, oxidative and photosynthetic phosphorylation, catabolism and anabolism. The discussion section reviews articles from the literature on recombinant DNA, signal transduction and other current topics. Prerequisite: CHEM132 and BCMB271. Mr. Thurlow/Offered every year

BCMB273 Principles of Molecular Modeling/Lecture
See Chemistry 273.

BCMB275 Protein Chemistry/Lecture
Presents an in-depth view of protein structures and molecular properties, and discussions of how structure and properties are inextricably linked to biological function. Topics discussed include: chemical properties of polypeptides, biosynthesis of proteins, posttranslational modifications, evolutionary and genetic origins of protein sequences, physical interactions that determine the properties of proteins, the folded conformations of proteins, proteins in solution and in membranes, interaction of proteins with other molecules, enzyme catalysis and protein degradation. This course has a computational component, which will provide students with hands-on learning experience using sophisticated molecular modeling/molecular mechanics software packages on a selected protein system. These projects will utilize in-house software packages as well as other programs accessed over the Internet. Prerequisite: BCMB271 or permission of instructor. Mr. Crampton/Offered every other year

BCMB279 Computer Biochemistry/Lecture
See Chemistry 279.

BCMB297 Honors
Departmental honors in biochemistry and molecular biology requires laboratory research, a thesis and a seminar. Staff/Offered every semester

BCMB298 Internship
Internships are arranged through the Career Services Office. Students may register under BCMB298 provided that the Clark internship supervisor is a member of the biochemistry and molecular biology program. Staff/Offered every semester

BCMB299 Directed Study
Individual investigations involving laboratory research under the direction of a professor or advanced readings in the scientific literature. Offered for variable credit. Prerequisite: permission of instructor. Staff/Offered every semester

BCMB328 Molecular Genetics/Lecture, Seminar
See Biochemistry and Molecular Biology 228.

BCMB352 Bioinorganic Chemistry/Lecture
See Biochemistry and Molecular Biology 252.

BCMB364 Biophysical Chemistry/Lecture, Laboratory
See Biochemistry and Molecular Biology 264.

BCMB371 Biochemistry I/Lecture, Laboratory
See Biochemistry and Molecular Biology 271.

BCMB372 Biochemistry II/Lecture
See Biochemistry and Molecular Biology 272.

BCMB375 Protein Chemistry/Lecture
See Biochemistry and Molecular Biology 275.

Program Faculty

Susan Foster, Ph.D. - *Chair*
David Hibbett, Ph.D.
Linda Kennedy, Ph.D.
Denis Larochelle, Ph.D.
Todd Livdahl, Ph.D.
Timothy Lyerla, Ph.D.
Deborah Robertson, Ph.D.
Justin Thackeray, Ph.D.

Adjunct Faculty

Halina Brown, Ph.D.
Donald Crampton, Ph.D.
Frederick Greenaway, Ph.D.
Dominik Kulakowski, Ph.D.
Noel Lazo, Ph.D.
John Rogan, Ph.D.
David Thurlow, Ph.D.

Research Faculty

John Baker, Ph.D.

Emeriti Faculty

Vernon Ahmadjian, Ph.D.
John Brink, Ph.D.
Joseph Curtis, Ph.D.
H. William Johansen, Ph.D.
Thomas Leonard, Ph.D.
John Reynolds, Ph.D.

Program Overview

The department offers courses that prepare students for work and advanced study in the biological and biomedical sciences; provides support for other programs within the University that require students to obtain a background in one or more subfields of biology; and meets the needs of nonscience majors who wish to integrate the perspectives of the science of biology into a liberal-arts curriculum. The major in biology is especially suitable for students who intend to go on to professional schools in the health sciences or graduate work in a variety of subfields of the biological sciences.

The department provides a curriculum for students wishing to optimize their breadth of exposure to the field as a whole. The department encourages students to identify an area to emphasize within biology and to plan a sequence of courses that will provide depth of exposure to the topics within that area, including a research experience, if possible.

The department offers two general curricula: one in cell and molecular biology and one in ecology and evolution. Prospective majors are urged to consult with an adviser selected from the department's faculty, especially to take advantage of opportunities to participate in ongoing research in the honors program, specialized research courses and internships.

Please note that the two-semester course, Introduction to Biology (BIOL101 and 102), is a prerequisite for all other courses in biology that will be used to meet the requirements for the major.

Undergraduate Requirements

The Biology Department's course offerings provide students with the flexibility to become broadly trained or to focus in a particular area of the biological sciences. The requirements and general recommendations for the biology major are appropriate for students seeking careers in health-related, research-related, education or academic fields. During their four years at Clark, students work closely with their academic advisers to select courses that best fit their overall academic interests and career goals.

Requirements for all biology majors:

- 10 courses in biology, including BIOL101 and BIOL102 (see below)
- Two courses in chemistry (CHEM101and CHEM102)
- Courses in mathematics to include a year of calculus MATH120 and 121, or MATH124 and 125, or one semester of calculus combined with BIOL106 Quantitative Methods in Biology; if Quantitative Methods in Biology is used to meet this requirement, it will not count toward the total of 10 required biology courses.
- Two additional courses in chemistry, physics, mathematics at 120 level or higher), computer science, geology, GIS, physical geography. Courses applied to the major must be at the 100 level or above.
- Science and mathematics courses offered to meet the major requirements may not be taken with a pass option.

At least two of the 10 required biology courses must be at the 200 level or above, and no courses below the 100 level may be used to satisfy major requirements.

Additional Requirements for the Generalized Biology Major

Of the eight courses beyond BIOL101 and BIOL102, one course must be completed in each of the following three areas:

1. Molecular and Cell Biology, including BIOL118 Genetics and BIOL137 Cell Biology
2. Organismal Diversity, including BIOL109 Microbiology, BIOL110 Botanical Diversity, BIOL112 Comparative Vertebrate Anatomy, BIOL140 Biology of the Brain and BIOL180 Introduction to Fungal Biology
3. Ecology and Evolution, including BIOL105 Evolution, BIOL114 Marine Biology, BIOL216 Ecology and BIOL220 Population Biology

In selecting these courses, biology majors should (1) take at least one course that develops research techniques and approaches in one area of biology, (2) take at least one seminar course, and (3) conduct a capstone project in a nonclassroom setting. This can be a directed study in a faculty research laboratory, an internship or an off-campus summer research experience.

To guide students interested in cell and molecular biology, ecology and evolution, and prehealth biology, recommended curricula are outlined below.

Recommended Curriculum for Cell and Molecular Biology

For students who wish to prepare for graduate studies in medicine or cell and molecular biology, education, or employment in biomedical research, the eight courses beyond BIOL101 and BIOL102 should be structured as follows:

- BIOL137 Cell Biology and BIOL118 Genetics
- Two upper-level informational courses aimed at advancing understanding of cell and molecular processes, including CHEM228 Molecular Genetics, BIOL250 Immunology, BIOL221 Developmental Biology, BIOL234 Signal Transduction, BIOL238 Seminar in Cell Biology and BIOL244 Biological Clocks.
- One course that develops research techniques: BIOL231 Recombinant DNA, BIOL219 Physiological Ecology of Marine Algae, BIOL229 Principles of Cell Culture, BIOL227 Somatic and Molecular Cell Genetics, BIOL254 Molecular Systematics and Evolution, BCMB271 Biochemistry or BIOL299 Directed Study.
- A minimum of three elective courses in biology
- Capstone project: Students are urged to pursue course experiences that remove them from the traditional classroom setting. These may include directed study in faculty research laboratories, internships or off-campus summer-research experiences.

Students should select these biology courses with the additional aim of completing courses in the three areas described above in the generalized biology major requirements. Students are encouraged to fulfill the additional science course requirement of the generalized major with Organic Chemistry and Physics.

Recommended Curriculum in Ecology and Evolution

For students who wish to prepare for work or advanced studies in ecology or evolutionary biology, the eight biology courses beyond BIOL101 and 102 should be structured as follows:

- BIOL105 Evolution
- Two courses that are primarily informational in content, aimed at describing a wide variety of aspects of the natural environment or evolution, including BIOL109 Microbiology, BIOL110 Introduction to Plant Diversity, BIOL112 Vertebrate Morphology, BIOL114 Marine Biology, BIOL180 Introduction to Fungal Biology, BIOL242 Animal Behavior
- Two courses with an analytical or theoretical orientation, including BIOL118 Genetics, BIOL135 Paradox of Animal Sociality, BIOL216 Ecology, BIOL220 Population Biology, BIOL232 Landscape Ecology, BIOL254 Molecular Evolution
- One course that develops research techniques: BIOL201 Ecology of Atlantic Shores, BIOL224 Ecology of Disease Vectors, BIOL219 Physiological Ecology of Marine Algae
- One seminar course: BIOL217 Ecology of Infectious Diseases, BIOL222 Community Ecology, BIOL223 Topics in Marine Biology, BIOL243 Comparative Biology, BIOL246 Biology of Symbiosis, BIOL252 Seminar in Mycology
- Capstone project: Students are urged to pursue course experiences that remove them from the traditional classroom setting. These include directed study in faculty research laboratories, internships, and summer or semester-long field courses.

Recommended Curriculum in Prehealth Biology

For more information, visit the Biology Web site at http://www.clarku.edu/departments/biology/undergrad/prehealth.cfm.

Honors Program

Qualified, upper-division students majoring in Biology may choose to carry out independent research in the honors program, under the direction of a faculty member in the department. Success in the program will result in notation on the student's diploma.

Prospective honors candidates should apply in writing to the chair of the Biology Department for admission into the honors program by April 15 of their junior year.

The application should include:

1. a list of courses taken and those the student plans to take in the major and related fields,
2. the name of their prospective faculty adviser, and
3. a brief description of the proposed honors project.

Requirements for the program are listed below:

- The candidate must maintain a "B" (3.0) average and grades of "B" or better in all biology courses during their junior and senior years.
- The candidate must complete Clark University and biology major requirements.
- The candidate must work with a faculty adviser. Together they will select two other faculty members to serve on the student's advisory committee.
- The candidate must complete at least one semester each of Directed Research (BIOL 299) and Honors Research in Biology (BIOL 297), and the investigation carried out must be summarized in an acceptable thesis.
- The candidate must present his/her work in a public presentation and pass a comprehensive oral defense-of-thesis exam given by the advisory committee. This exam will test the student on the specific area of investigation and can also include general knowledge of biology. The candidate must provide each advisory committee member a near-final draft of the thesis one week before the scheduled comprehensive defense.
- The candidate must complete a final draft of the thesis to the satisfaction of the committee and may be awarded honors, high honors, or highest honors.
- The original and two copies of the completed thesis must be submitted to the department five weeks before Commencement.

Biology Minor

The requirements for a minor in biology are:

- BIOL101 and BIOL102 Introductory Biology
- Four additional courses spanning at least two of the three subject categories set out in the Generalized Biology Major. A selection of appropriate courses in each designation is listed in the description of the major, but students are not restricted to selecting from this list. At least one of the four must be at the 200 level and none can be below the 100 level. All students wishing to complete a minor must select courses, receive approval from their biology faculty adviser and declare the minor by the end of the junior year, although earlier is recommended.

Accelerated Degree Program

Biology offers an accelerated B.A./Master's degree program to eligible students. For more information, visit www.clarku.edu/accelerate.

Graduate Program

The department offers course work leading to the Doctor of Philosophy in biology. The department has two foci for graduate emphasis: molecular and cell biology or ecology and evolution.

Students applying for admission must demonstrate adequate preparation in the basic sciences, an overall undergraduate record of B– or better, and satisfactory scores on the Graduate Record Examination (and TOEFL for International Students). Tuition scholarships and research and teaching assistantships are available to qualified students. Further information can be obtained from the department or online at www.clarku.edu/departments/biology/.

Courses

BIOL040 Brain and Environment/First-Year Seminar

This seminar is a laboratory-focused course on how we use specialized systems in our brains to find out about our environment. The class as a group will conduct original research on unsolved problem in human sensory physiology: how we detect and identify a food substance as sweet. We will review the known anatomy and physiology of the brain system for taste and discuss how systems for seeing, hearing, smelling and touching are similar. Then we will consider recent research on the problem of sweet taste, work out the details of our experimental design, test a group of human subjects, and analyze and interpret the data. Each student will write a final paper reporting the research in the style of a scientific journal article. Enrollment is limited to 12 students. A high-school chemistry background is recommended. Fulfills the Science Perspective. Ms. Kennedy.

BIOL084 Biodiversity/Lecture, Laboratory

Students will explore the diversity of life on earth and the mechanisms by which this diversity is thought to have been generated. The implications of loss of biodiversity will be considered, as well as the causes of biodiversity decline. Conservation issues will be addressed. Fulfills the Science Perspective. Not for biology majors. Staff/Offered alternate years.

BIOL100 Introductory Biology/First-Year Research Seminar in Fungal Molecular Ecology

Biology 100 will be a first-year research-oriented course that combines lectures and discussions with a semester-long, team-driven research project. The class will be restricted to ten incoming students with strong backgrounds in biology and will satisfy the requirement for BIOL100 in the biology major. BIOL100 will give first-year students an opportunity to pursue research in a small group setting in their first semester at Clark, and will simultaneously provide an introduction to the general topics treated in BIOL100 and training in writing and study skills. The central theme of this course will be an investigation of the fungal symbionts of Monotropa uniflora, which is a locally abundant species of nonphotosynthetic plants commonly known as Indian pipes. Monotropa uniflora steals carbohydrates from plants via fungal intermediates. We will collect plants in the field and identify their fungal partners using molecular tools. Mr. Hibbett/Offered every other year

BIOL101 Introduction to Biology I/Lecture, Laboratory

BIOL102 Introduction to Biology II/Lecture, Laboratory

This two-semester course is designed with three goals in mind: (1) to provide students with an understanding of the unifying themes in modern biology, (2) to introduce students to the diversity of life forms at all levels of organization, and (3) to illustrate the methods and modes of scientific inquiry in the biological sciences. The emphasis is on cellular and molecular biology during one semester and organismic and evolutionary biology during the other semester. Both semesters must be completed before a student can enroll in advanced courses offered to satisfy the requirements of the biology major. Qualified students must obtain approval from the chair of the department to have this requirement waived. Mr. Hibbett, Ms. Robertson/Offered in sequence every year

BIOL103 Principles of Environmental and Conservation Biology/Lecture, Laboratory

This course provides an introduction to biology appropriate for those interested in environmental and conservation biology. It is designed with three general goals in mind: (1) to provide students with an understanding of the unifying themes in modern biology, (2) to introduce students to the diversity of life forms at all levels of organization, and (3) to illustrate the methods and modes of scientific inquiry in the biological sciences. Students are introduced to principles of evolution, genetics, behavior and ecology. Satisfies BIOL101 requirement for the biology major and is one of three core requirements for the environmental science major. Fulfills the Science Perspective. Must register for lab for BIOL101. Ms. Foster, Mr. Thackeray/Offered every year

BIOL105 Evolution/Lecture, Laboratory, Discussion

An introduction to the mechanisms and patterns of evolutionary change during the earth's history. Although this course will briefly survey the major evolutionary events that have occurred since life first evolved, the emphasis will be on mechanisms of evolutionary change (e.g. mutation, natural selection, genetic drift and gene flow) and resultant patterns (e.g. phylogenetic pattern, coevolution, stasis, adaptive radiation). Prerequisites: BIOL100, 101 or 103, and BIOL102, or permission. Ms. Foster/Offered every year

BIOL106 Quantitative Methods in Biology/Lecture, Laboratory

An introduction to mathematical and statistical methods that are most useful to biologists, this course provides skills that are useful in organizing and summarizing data, graphic methods of data presentation, and testing hypotheses based on experimental results. Key mathematical methods for describing biological phenomena are included, along with basic techniques for identifying differences among groups and relationships among variables. This course may be used by biology majors to fulfill part of their mathematics requirement. Alternatively, it may be counted among the required 10 biology courses for the major. Prerequisites: BIOL101 or BIOL103, and BIOL102, and one semester of calculus (MATH120 or MATH124). Mr. Livdahl/Offered every year

BIOL109 Microbiology/Lecture, Laboratory

Introduces the fundamental principles and methods of microbiology with applications to the biomedical and environmental sciences. Emphasis is on bacteriology. Prerequisites: BIOL101 or BIOL103, BIOL102 and CHEM102; or permission of instructor. Staff/Offered every year

BIOL110 Introduction To Botanical Diversity/Lecture, Laboratory

Biodiversity and structure of plants, protists and fungi are examined in a phylogenetic context. The evolution of photosynthetic mechanisms, transport systems and nutritional modes are considered, as are the ecological and economic significance of plants and other organisms traditionally studied by botanists. Prerequisites: BIOL100, 101 or 103, and BIOL102. Mr. Hibbett/Offered every other year

BIOL111 Basic Human Anatomy/Lecture,Laboratory

An introduction to the anatomy of organs and organ systems in the human, including the skeletal, muscle, circulatory, digestive, urogenital, respiratory and nervous systems, along with the sense organs. The laboratory uses the cat as the model for the human organs and organ systems, which requires dissection of preserved, latex-injected specimens, and includes the human skeletal system. Mr. Lyerla/Offered every year

BIOL114 Marine Biology/Lecture, Field Trips

Introduces the diversity and ecology of life in the oceans. Studies of basic physical oceanography and marine ecology precede studies of marine ecosystems such as salt marshes, kelp forests, rocky shores plankton and deep seas. Also included are the relationships of marine biology to the welfare of mankind. Prerequisites: BIOL100, 101 or 103, and BIOL102, or permission. Ms. Robertson/Offered every year

BIOL116 Forest Ecology/Lecture, Discussion

See Geography 116.

BIOL118 Genetics/Lecture, Laboratory

Investigates the nature of genes and their role in governing heredity in both prokaryotes and eukaryotes. Includes the principles of gene transmission, the nature of gene and chromosomal mutation, principles of gene mapping. Some aspects of molecular genetics and mechanisms of gene expression will be discussed, but are not a major part of the course. Additional topics include population and quantitative genetics, as well as the role of genes in behavior. Also includes an integrated laboratory that highlights many aspects of the lectures. Prerequisites: BIOL101 or BIOL103, and BIOL102. Mr. Thackeray/Offered every year

BIOL137 Cell Biology/Lecture, Laboratory

The cell as a functional unit is discussed from the molecular level to the whole cell. Included are introductions to the biochemistry and metabolic roles of some of the molecules and macromolecules that are found in cells. Also discussed are the evolution, structure and function of the various subcellular organelles and the cytoskeleton. Emphasis is placed on understanding the molecular mechanisms behind cell physiology and the experimental methods used to determine those mechanisms. Prerequisites: BIOL100, 101 or 103, and BIOL102.
Mr. Larochelle/Offered every year

BIOL140 Biology of the Brain/Lecture, Laboratory, Discussion

An introduction to the organization and function of the nervous system. Lectures focus on the human brain with reference to knowledge obtained from animal models. Includes basic information about the anatomical, physiological and chemical properties of the brain and how these properties enable us to perceive and move around in our environment. Laboratory/discussion sessions include demonstrations of nerve-cell signaling, testing of human reflexes and sensory perception, dissections, and discussion of issues that arise in modern neuroscience: understanding the relation between the mind and brain. Fulfills the Science Perpective. Prerequisites: BIOL101 or BIOL102, or permission of instructor. Ms. Kennedy/Offered every year

BIOL141 Brain and Behavior/Lecture, Discussion

An exploration of how specific neural systems are involved in various behaviors. Emphasizes first, systems where the relationships between brain and behavior are best understood, such as perception, motivation, mood, emotion, sleep and consciousness, language and attention. Second, information from the frontiers of neuroscience about how the biology of the brain changes as the result of the experiences of the individual, including mechanisms for learning and memory, is discussed. Prerequisite: BIOL140. Ms. Kennedy/Offered every year

BIOL201 Ecology of Atlantic Shores/Lecture, Field Trip

This course explores the ecology of marine organisms found in diverse Atlantic habitats, ranging from the rocky intertidal of New England to the coral reefs of Bermuda. The course includes lectures, field research and a one-week trip to the Bermuda Biological Station for Research during semester break. Students must pay a fee (approximately $1400) for the cost of lodging, meals and airfare to Bermuda. Prerequisites: BIOL101 or BIOL103, and BIOL102. Recommended: BIOL114 or BIOL216. Mr. Livdahl and Ms. Roberston/Offered every other fall

BIOL216 Ecology/Lecture, Laboratory

Provides an overview of ecology as a scientific discipline. The primary emphasis is on efforts to explain and predict the distribution and abundance of organisms, how ecological communities are composed and why they vary in time and space. Prerequisites: one or more courses from the organismal biology group and one college-level math course. Mr. Livdahl/Offered every year

BIOL217 Ecology of Infectious Disease/Seminar

Explores the relationship between infectious disease agents and their hosts and how that interaction can effect changes in the abundance of host and pathogen populations. Factors that contribute to the occurrence and persistence of epidemics, the evolution of virulence and transmission and strategies for controlling epidemics will be considered using theoretical approaches and case studies of diseases affecting humans and other hosts. A wide spectrum of human diseases will be considered, including human pathogens of recent concern (examples include HIV, Lyme Disease, West Nile Virus) and of historic and continuing importance (e.g., schistosomiasis, bubonic plague, malaria, smallpox, yellow fever). Prerequisites: BIOL216 or BIOL220.
Mr. Livdahl/Offered periodically

BIOL219 Physiological Ecology of Marine Algae/Lecture, Laboratory

This course will introduce upper-division undergraduate and graduate students to algal diversity and the physiological ecology of marine algae. The course will include lectures, readings, discussions and laboratory research. Topics of discussion include evolution, biochemistry, molecular biology and physiology of photosynthetic cells. In the laboratory, students will learn various techniques including measurements of photosynthesis, determination of enzyme activity and methods used to examine gene expression. The topics and techniques covered in the course are readily applied to the physiology of a broad range of organisms. Prerequisites: Either BIOL110, BIOL118 or BIOL137.
Ms. Robertson/Offered every spring

BIOL220 POPULATION BIOLOGY/LECTURE
Examines the properties that exist only at the population level, including schedules for birth and death, population growth patterns, spatial variation in abundance, genetic variation and the factors that modify these features over time. Prerequisites: BIOL118 and BIOL216, or permission of instructor. Mr. Livdahl/Offered every other year

BIOL221 DEVELOPMENTAL BIOLOGY/LECTURE, LABORATORY
Considers the fundamentals of development from the molecular level up to the organismal. Emphasis is placed on the major animal model systems. Prerequisites: BIOL137 or permission of instructor. Mr. Larochelle/Offered every other year

BIOL223 TOPICS IN MARINE BIOLOGY/LECTURE, SEMINAR
Provides an opportunity to delve in-depth into selected topics in marine biology. This writing-intensive course uses dicussions of the primary literature to explore topics in genomics, microbial ecology, oceanography and marine biology. Limited to 15 students. Prerequisite: BIOL114. Ms. Robertson/Offered every other year

BIOL224 ECOLOGY OF DISEASE VECTORS/LECTURE, LABORATORY
This course provides a field-intensive, project-oriented exposure to the biology of arthropods that transmit disease, with particular emphasis on ecology of mosquitoes. Methods include quantitative sampling techniques, species identification based on morphology and DNA, detection of medically important viruses, and experimental approaches to understanding interactions among species. The primary aim for the group will be to track the course of mosquito invasions. We will process samples obtained from school groups throughout the Midwest and Mid-Atlantic States to track the progress of a mosquito introduced from Asia. We will examine in detail two invasions that are presently under way in Bermuda and conduct experiments on egg-laying behavior during a weeklong field trip to Bermuda. Field trips will also include trips to wetlands and forests in New England. Students must pay a fee (approximately $1400) for the cost of lodging, meals and airfare to Bermuda. Prerequisites: BIOL101, and either 102 or 103. Mr. Livdahl/Offered every year

BIOL228 MOLECULAR GENETICS/LECTURE, SEMINAR
See Biochemistry and Molecular Biology 228.

BIOL231 RECOMBINANT DNA/LECTURE, LABORATORY
A laboratory-oriented course designed to introduce recombinant DNA methodology. Students undertake a semester-long project, which will vary each time the course is offered. A typical project might involve construction of a genomic library, isolation of specific clones from the library and characterization of these clones. Methods usually include DNA purification, Southern blot hybridization, restriction enzyme mapping, bacterial transformation, polymerase chain reaction (PCR) and DNA sequencing. Prerequisite: BIOL118 or permission of instructor. Mr. Larochelle/Offered every year.

BIOL232 LANDSCAPE ECOLOGY/LECTURE, DISCUSSION
See Geography 232.

BIOL234 SIGNAL TRANSDUCTION/LECTURE
An advanced course exploring the various molecular and biochemical pathways through which cells communicate with themselves and the extracellular environment. Topics include protein phosphorylation, G-proteins, phospholipid metabolism, the action of oncogenes and several ionic signalling pathways. Both lectures and student presentations of papers culled from current literature. Prerequisite: BIOL137 or BIOL271 or permission of instructor. Mr. Larochelle/Offered periodically

BIOL238 SEMINAR IN CELL BIOLOGY/SEMINAR
Discussion based on research papers from the current literature, will be focused on an area in cell biology selected by the participants on the first day. The weekly readings will be selected by both the students and the faculty member. The scientific content, as well as the methodology will be discussed in detail. Prerequisites: BIOL137 or permission of the instructor. Mr. Larochelle/Offered every other year.

BIOL240 HUMAN PHYSIOLOGY/LECTURE
Introduces the principles underlying physiological function. Lectures cover the subcellular, cellular and organ levels of organization and place a primary emphasis on the integrative processes whereby all of the diverse organs and systems contribute to the performance of the complete individual. Prerequisites: BIOL137 or BIOL271. Enrollment is normally restricted to juniors, seniors and graduate students. Ms. Kennedy/Offered every year

BIOL241 ENVIRONMENTAL TOXICOLOGY/LECTURE
See Environmental Science 241.

BIOL242 ANIMAL BEHAVIOR/LECTURE, LABORATORY
Examines the causes and evolution of the behavior of animals. The largest part of this course will focus on the adaptive value and evolution of behavioral patterns, but a general overview of behavioral development and causation will be provided to offer the necessary background for interpretation of the ultimate causes of behavior. Prerequisites: BIOL105 or BIOL220 and permission of instructor. Ms. Foster/Offered every other year

BIOL243 SEMINAR IN EVOLUTION/SEMINAR
See Biology 243.

BIOL244 BIOLOGICAL CLOCKS/DISCUSSION, LECTURE
Every organism living at the surface of the Earth is exposed to daily, rhythmic changes in the environment. In response, an innate and well-conserved pacemaker has evolved that allows us to fit our physiology and behavior to this cycle. The course will introduce the fundamentals of how these circadian clocks (and clocks working at other time-scales) work at the molecular level, where they reside, how they exert their effects, and the effects the clock has on the whole organism. We will examine clocks in model organisms, as well as those in humans, and the relevance of biological clocks to human welfare. Prerequisite: BIOL118 Genetics, or BIOL137 Cell Biology, or permission of instructor. Mr. Thackeray/Offered periodically

BIOL250 IMMUNOLOGY/LECTURE, DISCUSSION
Immunology is a study of the principles of innate and adaptive immunity. We first introduce the cells of the immune system and the tissues in which they develop and through which they circulate or migrate. We discuss the specialized functions of the different types of cells and the mechanisms whereby they eliminate infection. Permission from instructor. Staff/Offered every year

BIOL254 MOLECULAR SYSTEMATICS AND EVOLUTION/LECTURE, LABORATORY
This course is designed for students who are interested in either molecular or evolutionary biology. Topics to be discussed include evolution of genes and genomes, methods used to estimate evolutionary relationships using molecular data, and applications of molecular data to general problems in biology. The course will include lectures, student-led discussions, laboratory projects using computer-based applications and presentations of these projects. Prerequisites: BIOL100, 101 or 103, and BIOL102. Mr. Hibbett and Ms. Robertson/Offered periodically

BIOL256 Biology of Symbiosis/Lecture, Laboratory
This course focuses on the ecological and evolutionary aspects of symbioses, the intimate associations among different species that are ubiquitous in nature. Examples of symbioses include lichens, corals and pollination syndromes. Lectures introduce general theory regarding evolution and ecology of symbioses, and student-led discussions are based on primary research articles focusing on specific systems. Prerequisites: BIOL100, 101 or 103, and BIOL102. Mr. Hibbett/Offered every other year

BIOL258 Conservation Biology
Conservation Biology focuses on the biological underpinnings of efforts to preserve biodiversity in the face of increasing impacts of human activities. This seminar builds upon student background in ecology and evolution, developing skills for assessment of the fundamental biological information needed to develop policy that can lead to the protection of threatened and endangered species/populations/evolutionarily significant units. Prerequisites: BIOL105; BIOL216; instructor permission. Ms. Foster/Offered every other year

BIOL271 Biochemistry I/Lecture, Laboratory
See Biochemistry and Molecular Biology 271.

BIOL272 Biochemistry II/Lecture
See Biochemistry and Molecular Biology 272.

BIOL297 Honors in Biology
Readings and research for students in the honors program. Staff/Offered every year

BIOL298 Internship
Independent research at off-campus sites for the purpose of broadening the backgrounds of qualified students. Each internship is guided by an on-site professional and a department faculty member. Staff/Offered every year.

BIOL299 Directed Study
Advanced readings or research under the direction of a department faculty member. Prerequisite: permission of instructor. Staff/Offered every year

BIOL301 Ecology of Atlantic Shores/Lecture, Field Trip
See Biology 201.

BIOL302 Applied Ecology
See International Development, Community and Environment 30288.

BIOL315 Ecology of Infectious Disease/Seminar
See Biology 217.

BIOL316 Ecology/Lecture, Laboratory
See Biology 216.

BIOL317 Seminar in Genetics
Students will participate in a weekly discussion of primary research papers from the current literature. The papers will be focused on an area of genetics selected by the participants on the first day, and the weekly readings will be selected by both the students and the faculty member. Both the scientific content and the methodology of each paper will be discussed in detail. Prerequisites: BIOL118 and permission of the instructor. Mr. Thackeray/Offered every other year

BIOL320 Population Biology/Lecture
See Biology 220.

BIOL321 Developmental Biology/Lecture, Laboratory
See Biology 221.

BIOL322 Physiological Ecology of Marine Algae/Lecture, Laboratory
See Biology 219.

BIOL323 Topics in Marine Biology/Lecture, Seminar
See Biology 223.

BIOL324 Ecology of Disease Vectors/Lecture, Laboratory
See Biology 224.

BIOL331 Recombinant DNA/Lecture, Laboratory
See Biology 231.

BIOL332 Landscape Ecology/Lecture, Discussion
See Geography 232.

BIOL334 Signal Transduction/Lecture
See Biology 234.

BIOL338 Seminar in Cell Biology/Seminar
See Biology 238.

BIOL340 Human Physiology/Lecture
See Biology 240.

BIOL341 Environmental Toxicology/Lecture
See Environmental Science 241.

BIOL342 Animal Behavior/Lecture, Laboratory
See Biology 242.

BIOL343 Seminar in Evolution/Seminar
See Biology 343.

BIOL344 Biological Clocks/Discussion, Lecture
See Biology 244.

BIOL347 Sensory Physiology/Seminar
See Biology 247.

BIOL350 Graduate Research Seminar
Invited lecturers present seminars on varied research topics. Required for all graduate students. Offered for variable credit. Staff/Offered every semester

BIOL351 Immunology/Lecture, Discussion
See Biology 250.

BIOL354 Molecular Systematics and Evolution/Lecture, Laboratory
See Biology 254.

BIOL356 Biology of Symbiosis/Lecture, Laboratory
See Biology 256.

BIOL358 Conservation Biology
See Biology 258.

BIOL371 Biochemistry I/Lecture, Laboratory
See Biochemistry and Molecular Biology 271.

BIOL372 Biochemistry II/Lecture
See Biochemistry and Molecular Biology 272.

BIOL373 Seminar in Biogeography/Lecture, Discussion
See Geography 372.

BIOL396 Master's Thesis
Offered for variable credit. Staff/Offered every year

BIOL397 Doctoral Dissertation
Offered for variable credit. Staff/Offered every year

BIOL398 Internship
Offered for variable credit. Staff/Offered every year

BIOL399 Directed Study
Offered for variable credit. Staff/Offered every year

GEOG372 Seminar in Biogeography/Lecture, Discussion
See Geography 372.

IDCE30288 Applied Ecology
See Biology 302.

CHEMISTRY

Program Faculty

Mark Turnbull, Ph.D. - *Chair*
Daeg Brenner, Ph.D.
Donald Crampton, Ph.D.
Karen Erickson, Ph.D.
Frederick Greenaway, Ph.D.
Shuanghong Huo, Ph.D.
Noel Lazo, Ph.D.
Luis Smith, Ph.D.
David Thurlow, Ph.D.

Emeriti Faculty

Harry C. Allen Jr., Ph.D.
Edward N. Trachtenberg, Ph.D.
Wen-Yang Wen, Ph.D.

Program Overview

The Chemistry Department offers an undergraduate program with the following goals in mind:

- to provide a variety of course offerings that are consistent with the accreditation requirements of the American Chemical Society;
- to offer a program that will prepare students for graduate work in chemistry and related fields;
- to provide a strong scientific background for students planning careers in health-related professions;
- and to encourage students not majoring in science to obtain an overview of the impact of science on society.

The department offers two tracks leading to a B.A. in chemistry. The requirements for the two tracks are designed to allow students to choose their course work depending upon their ultimate career goals.

Undergraduate Requirements

All students in either track (Standard and ACS-Certified) must complete two courses in calculus (either MATH120 and 121, or MATH124 and 125) and two courses in physics (either PHYS110 and 111, or preferably PHYS120 and 121). Students must also demonstrate competence in communicating chemical concepts (e.g., through reports based on research in the chemical literature, Academic Spree Day presentations, directed-study papers, honors theses, or publications), and take at least four of the five ACS standardized exams (either as part of the Honors program, or as a separate assessment of their understanding of a body of knowledge in chemistry).

In addition:

ACS-Certified Track

Students must complete 11 courses in chemistry, including:
CHEM101 Introductory Chemistry I
CHEM102 Introductory Chemistry II
CHEM131 Organic Chemistry I
CHEM132 Organic Chemistry II
CHEM142 Environmental Chemistry or
  CHEM144 Bioanalytical Chemistry
CHEM250 Inorganic Chemistry
CHEM260 Physical Chemistry I
CHEM262 Physical Chemistry II or
  CHEM264 Biophysical Chemistry
CHEM271 Biochemistry

The remaining two-course requirement is normally satisfied by advanced chemistry courses, one of which may be directed study or honors. Instead of CHEM271, the student may substitute CHEM144 Bioanalytical Chemistry and CHEM264 Biophysical Chemistry, in which case they will need an additional elective because CHEM144 and CHEM264 satisfy core (not elective) requirements. On rare occasions, with advanced permission from the department, the student may substitute one advanced-level course in computer science, mathematics, physics or biology.

Standard Track

Students must complete 10 courses in chemistry including:
CHEM101 Introductory Chemistry I
CHEM102 Introductory Chemistry II
CHEM131 Organic Chemistry I
CHEM132 Organic Chemistry II
CHEM142 Environmental Chemistry or
  CHEM144 Bioanalytical Chemistry
One semester of Physical Chemistry
  (either CHEM260, 262 or 264)

The remaining four courses must be advanced-level chemistry courses (200 or higher) and at least two of them must have laboratory sections. One course may be Directed Study.

The ACS-certified track meets the entrance requirements for graduate study in chemistry and is recommended for those students with a strong interest in chemistry and a desire for a profession in the chemical sciences. The standard track offers more latitude in course selection and is appropriate for those students with an interest in chemistry, but who plan to continue in one of the health professions (medical, dental or veterinary school), public-school teaching, technical sales, etc.

The requirements for the first two years are identical, so students do not need to make a final decision on which track to follow until the end of their sophomore year, but are encouraged to discuss career plans with members of the department early to make the most appropriate choice.

A student may elect as his or her first course in chemistry: CHEM010, 101, 102 or 131. Science majors normally begin with CHEM101. The decision to begin with CHEM102, 103 or 131 must be made in consultation with the department and may require taking a placement examination offered at the beginning of each semester. The department encourages students with two or more years of high school chemistry to consider this option, as it allows time for additional electives in the junior and senior years. The department publishes an undergraduate handbook, Chemistry at Clark, which provides additional information. Copies are available in the department office.

Students planning graduate study in chemistry are strongly urged to take CHEM270, 231 and/or additional advanced courses in mathematics, physics and biochemistry. All majors are encouraged to undertake independent research projects as a candidate for honors, directed study or through one of the department's summer research fellowships, and are eligible to do so following completion of CHEM102.

Honors Program

An honors program is offered for highly qualified and motivated majors. Students who want to enter this program must apply in writing to the department chair prior to the beginning of their senior year. Participants are required to engage in an independent research project, participate in the department seminar program and pass a set of comprehensive examinations. Further information about the program can be obtained from the department chair or the undergraduate handbook.

Chemistry Minor

The requirements for a minor in chemistry are:

- Introductory Chemistry I and II (CHEM101 and 102)
- Organic Chemistry I and II (CHEM131 and 132)
- Two additional courses in chemistry (numbered higher than 132), neither of which may be used to satisfy requirements for other majors, minors or concentrations.

Accelerated Degree Program

Chemistry offers an accelerated B.A./Master's degree program to eligible students. For more information, visit www.clarku.edu/accelerate.

Graduate Program

The department offers programs leading to the degrees of Master of Arts and Doctor of Philosophy with specialization in various fields of chemistry. Emphasis is placed on tailoring programs to fit the specific needs and desires of the graduate student. To facilitate this goal, a committee of interested faculty works with each student to advise and review his/her progress in research work and course requirements (five courses from specific areas of chemistry for Ph.D. students). Up to one year's equivalent of teaching apprenticeship will be required of all candidates for advanced degrees. In addition to formal course work, all students must pass qualifying examinations and submit and defend a research thesis.

Ph.D. candidates must pass preliminary examinations and meet the department language requirement. For further details, students should consult the appropriate departmental publications. Graduate scholarships, teaching assistantships and research fellowships are available.

Courses

CHEM007 Science of Weapons of Mass Destruction/ Lecture, Laboratory

The science behind weapons of mass destruction will be discussed. Topics include low-technology explosives, nerve agents, biological agents and nuclear devices. In each case, introductory science concepts will be used to explain how the device or agent works. Historical examples will be reviewed, such as the Oklahoma bombing, Wisconsin Army Research Lab bombing, Tokyo Sarin subway attack, World War I gas attacks, Kurdish gas attack, anthrax letters and Hiroshima/ Nagasaki. The technical basis for preventing the use of these weapons will also be discussed as will be the availability of information on the Internet. Fulfills the Science Perspective. Staff/Offered every year

CHEM010 Topics in Contemporary Chemistry/Lecture, Laboratory

This course is designed for students majoring in a social science or the humanities and is intended to develop a qualitative feeling about chemistry as it relates to the modern world. Approximately half the course is concerned with the development of modern chemical concepts; the remainder deals with current societal problems such as nuclear weapons and reactors, air and water quality, drugs, food additives, polymers, poisons and others. In-class and final exams. Staff/Offered every year

CHEM101 Introductory Chemistry I/Lecture, Laboratory

Designed to meet the needs of science majors and the prehealth program, as well as those seeking a rigorous introduction to chemistry as part of their liberal-arts education. Introduces fundamental chemical concepts and applies them to a discussion of structure, bonding and reactivity of molecules. Knowledge of high-school algebra is necessary; high-school chemistry and physics are helpful, but not required. The laboratory teaches techniques of chemical experimentation and methods of chemical analysis. In-class and final exams, laboratory reports and quizzes. Staff/Offered every year

CHEM102 Introductory Chemistry II/Lecture, Laboratory

Continues CHEM101 with a discussion of thermodynamics, equilibrium theory, kinetics, electrochemistry and the application of such theories to studies of structure and research of molecules. The laboratory studies experimental techniques related to the lecture material. Prerequisite: CHEM101 or advanced placement. In-class and final exams, laboratory reports and quizzes. Staff/Offered every year

CHEM103 Accelerated Introductory Chemistry/Lecture, Laboratory

This is a one-semester course for students with a strong background in chemistry who do not need the traditional two-semester sequence. Upon completion of CHEM103, students are eligible to go directly to CHEM131 (Organic Chemistry I), thereby accelerating their program in chemistry by one semester and allowing for additional elective courses during their junior and senior years. Topics include atomic and molecular structure, geometry, bonding, reactions, equilibria, thermodynamics, acids and bases, basic kinetics and stoichiometry. Permission of instructor. Staff/Offered every fall

CHEM131 Organic Chemistry I/Lecture, Laboratory

Discusses the chemistry of carbon and its compounds. The structures and reactions of related classes of organic molecules are systematically studied with emphasis on reaction mechanism and structural factors that affect reactivity. The laboratory concentrates on the preparation and physical, spectroscopic and chemical properties of these classes of compounds. Prerequisite: CHEM102 or advanced placement. In-class and final exams, laboratory reports. Ms. Erickson, Mr. Turnbull/Offered every year

CHEM132 Organic Chemistry II/Lecture, Laboratory

Continuation of CHEM131. Ms. Erickson, Mr. Turnbull/Offered every year

CHEM134 Biological Organic Chemistry/Lecture, Laboratory

CHEM134 is the second semester of the two-semester organic-chemistry sequence and builds upon the concepts of structure, bonding, geometry, stereochemistry and fundamental reaction mechanisms developed in CHEM131. Special emphasis is placed on the biological applications of organic chemistry. Topics include the chemistry of aromatic compounds, carbonyl compounds, amines, lipids, carbohydrates, amino acids, peptides and nucleic acids. Students may receive credit for either

CHEM132 or CHEM134. Prerequisite: CHEM131. Ms. Erickson/ Offered every spring

CHEM142 Environmental Chemistry/Lecture, Laboratory
Focuses on chemistry related to environmental problems, with emphasis on aquatic chemistry and aquatic and air pollution. Equilibrium theory is developed as a model for aquatic chemistry and chemical analyses of local aquatic systems are conducted in the laboratory according to EPA procedures. Prerequisite: CHEM102, CHEM103 or advanced placement. In-class and final exams, laboratory reports. Mr. Greenaway/Offered every year

CHEM144 Bioanalytical Chemistry/Lecture, Laboratory
See Biochemistry and Molecular Biology 144.

CHEM222 Statistical Thermodynamics/Lecture
An introduction to statistical mechanics, thermodynamics and chemical kinetics with applications to problems in chemistry and biochemistry. Staff/Offered periodically

CHEM228 Molecular Genetics/Lecture, Seminar
See Biochemistry and Molecular Biology 228

CHEM231 Advanced Organic Chemistry/Lecture
Provides a framework for students who wish to pursue an interest in organic chemistry beyond the level covered in CHEM131/132 by bridging the gap between material in standard elementary organic texts and the original literature. Advanced topics selected from structure and reaction mechanisms include stereochemistry and ionic, free radical, carbenoid and concerted reaction mechanisms. Prerequisite: CHEM132. Ms. Erickson/Offered every other year

CHEM233 Synthetic Organic Chemistry/Lecture
The synthesis of organic compounds is discussed. Topics include the scope and limitations of general methods, mechanistic aspects and stereochemistry. Special emphasis is placed on the total synthesis of complex molecules from design of methods to execution. Prerequisite: CHEM231 or permission. Mr. Turnbull/Offered every other year

CHEM235 Natural Products/Lecture
The structure, biosynthesis and chemistry of selected secondary metabolites including steroids, terpenoids, alkaloids and actogenins of both terrestrial and marine origin are discussed. Biogenetic theory is used extensively to emphasize the simplicity within the complexity of those natural products. Structure determination by modern spectroscopic methods is also discussed. Prerequisite: CHEM132. Ms. Erickson/ Offered every other year

CHEM236 Organometallic Chemistry/Lecture
Covers material related to compounds containing one or more covalent metal-carbon bonds. The material progresses from the traditional organometallics, such as Grignards and cuprates, through the transition metal and main group complexes. Emphasis is placed on the properties of organometallic compounds and mechanisms of their formation and subsequent reactions. Because of the continuing development of the field, use of the primary literature is stressed. A comparison of traditional organic and inorganic chemistry is developed through this intermediate field. Prerequisite: CHEM250 and 260 or permission of the instructor. Mr. Turnbull/Offered every other year

CHEM242 Nuclear Science/Lecture
Covers the fundamentals of nuclear chemistry and physics: production, isolation, identification, structure and measurement of radioactive atoms. Prerequisite: permission of the instructor. Mr. Brenner/Offered periodically

CHEM250 Inorganic Chemistry/Lecture, Laboratory
Deals with theories of structure and bonding and their utility in explaining the chemistry of inorganic substances, especially compounds of transition metals. Topics include: molecular orbital, valence bond, and crystal field theories of bonding and examples of the use of theories in explaining the structure and reactivities of inorganic molecules; acid base theory; spectroscopic methods; and kinetics. Emphasis is placed on the interpretation of structure and reactivity in terms of basic molecular and atomic parameters. Prerequisite: CHEM132 and 142 or 144. In-class and final exams, laboratory reports. Mr. Greenaway/Offered every year

CHEM252 Bioinorganic Chemistry/Lecture
See Biochemistry and Molecular Biology 252.

CHEM256 Inorganic Materials/Lecture
Deals with structure-property relationships in inorganic materials. The range of topics includes a survey of the factors controlling structure, lattice energy, prominent structure types and variations in properties as a function of composition. Discussion of analysis methods, synthesis and the prominent uses of these materials will be incorporated into the course. Pre- or corequisite: CHEM250 and 260 or PHYS131 or permission. Mr. Smith/Offered every other year

CHEM260 Physical Chemistry/Lecture, Laboratory
Covers basic principles of quantum mechanics and their application for understanding fundamental aspects of atomic structure and molecular bonding. Requires a good working knowledge of calculus (entrance exam). The laboratory includes experiments in general physical chemistry. Prerequisite: MATH121 or 125 and CHEM132. Staff/Offered every year

CHEM261 Magnetic Resonance Theory/Lecture
The theory of static and time-dependent interactions involved in magnetic resonance spectroscopy is presented. Energy states are defined on the basis of the time-independent Hamiltonian and reflect symmetry. The time-dependent terms in the Hamiltonian are used to develop descriptions for line-shape collapse and relaxation. Prerequisite: CHEM270. Staff/Offered every other year

CHEM262 Physical Chemistry II/Lecture, Laboratory
Continues CHEM260 covering fundamental aspects of physical chemistry from a molecular perspective. Topics that are covered include Boltzmann's law, statistical mechanics, thermodynamics, phase equilibria, ideal and nonideal solutions, chemical equilibrium, chemical kinetics and molecular spectroscopy. Prerequisite: CHEM260. Staff/Offered every other year

CHEM264 Biophysical Chemistry/Lecture, Laboratory
See Biochemistry and Molecular Biology 264.

CHEM266 Biomolecular NMR/Lecture
Covers theory and application of multidimensional nuclear magnetic resonance (NMR) spectroscopy for the study of structure and dynamics of biomolecules in solution. Staff/Offered periodically

CHEM267 Computational Chemistry: Electronic Structure Methods/Lecture, Laboratory
This course is designed to introduce the student to the electronic structure modeling methods, which are available to investigate the chemical phenomena. It will provide a hands-on experience using the electronic structure modeling software packages to study the properties

of molecules and reactions. Topics will include molecular orbital theory and calculations on molecular energies and structures, energies and structures of transition states, bond and reaction energies, atomic charges, IR spectrum, NMR properties and reaction pathways. Prerequisites: CHEM262 or 270. Ms. Huo/Offered every other year

CHEM270 Quantum Chemistry/Lecture

Essentially an introduction to quantum mechanics. Covers elementary quantum mechanical treatments of the structure of atoms and molecules. Prerequisite: CHEM262 or 264. Mr. Brenner/Offered periodically

CHEM271 Biochemistry I/Lecture, Laboratory

See Biochemistry and Molecular Biology 271.

CHEM272 Biochemistry II/Lecture

See Biochemistry and Molecular Biology 272.

CHEM273 Principles of Molecular Modeling/Lecture

This course is intended mainly for advanced undergraduates and graduate students. The aim of the course is to introduce the principles and algorithms of molecular modeling and to illustrate how these algorithms can be used to study biochemical/biophysical phenomena. We will go over basic elements of classical molecular simulations, focusing of force fields, energy minimization, molecular dynamics and Monte Carlo. Prerequisite: CHEM260. Ms. Huo/Offered every other year

CHEM275 Protein Chemistry/Lecture

See Biochemistry and Molecular Biology 275.

CHEM279 Computer Biochemistry/Lecture

The course will provide a hands-on experience using computers to analyze chemical and biochemical systems. Students will be introduced to the use of relevant Web-based and commercial software packages. The course will meet one afternoon (3 hours) per week. The exact topics to be covered may vary from year to year as new software packages become available. Topics will include retrieval and analysis of DNA and protein sequence information from national databases; use of sequence information to identify homologous nucleic acids or proteins, design cloning experiments, and predict protein secondary and tertiary structures; simulations of protein dynamics and ligand binding; and using X-ray crystallography and NMR data to determine protein structure and dynamics. Prerequisite: BCMB271. Staff/Offered periodically

CHEM281 Polymer Science/Lecture

The physical chemistry of synthetic polymers is presented, including discussion of kinetic mechanisms of polymerization, molecular weight distributions, unperturbed dimensions, structure and conformation, viscosity, and dynamic properties. Specific experimental methods useful in polymer chemistry such as osmotic pressure, light scattering, gel permeation chromatography, viscoelastic response, NMR and dielectric response also are reviewed. Prerequisite: CHEM262 or 264. Staff/Offered periodically

CHEM289 Research Methods/Lecture, Laboratory

Deals with the application of analytical tools widely used in the laboratory. Topics include NMR, EPR, IR, Raman, UV-visible, mass and fluorescence spectroscopy, chromatography, electrophoresis, electrochemistry and other techniques. Emphasizes practical knowledge for data interpretation and instrument operation. Quarter-credit courses lasting four to five weeks are offered periodically. Prerequisite: CHEM262 or 264 or permission. Staff/Offered periodically

CHEM297 Honors

For majors seeking departmental honors in chemistry. Involves a laboratory research project and participation in department seminars. Offered for variable credit. Prerequisite: permission of the department chair. Staff/Offered every semester

CHEM299 Directed Study

Individual investigations that involve laboratory and literature research. Offered for variable credit. Prerequisite: permission. Staff/Offered every semester

CHEM322 Statistical Thermodynamics/Lecture

See Chemistry 222.

CHEM331 Advanced Organic Chemistry/Lecture

See Chemistry 231.

CHEM335 Natural Products/Lecture

See Chemistry 235.

CHEM336 Organometallic Chemistry/Lecture

See Chemistry 236.

CHEM342 Nuclear Science/Lecture

See Chemistry 242.

CHEM350 Inorganic Chemistry/Lecture, Laboratory

See Chemistry 250.

CHEM352 Bioinorganic Chemistry/Lecture

See Biochemistry and Molecular Biology 252.

CHEM356 Inorganic Materials/Lecture

See Chemistry 256.

CHEM360 Physical Chemistry/Lecture, Laboratory

See Chemistry 260.

CHEM361 Magnetic Resonance Theory/Lecture

See Chemistry 261.

CHEM362 Physical Chemistry II/Lecture, Laboratory

See Chemistry 262.

CHEM364 Biophysical Chemistry/Lecture, Laboratory

See Biochemistry and Molecular Biology 264.

CHEM366 Biomolecular NMR/Lecture

See Chemistry 266.

CHEM367 Computational Chemistry: Electronic Structure Methods/Lecture, Laboratory

See Chemistry 267.

CHEM370 Quantum Chemistry/Lecture

See Chemistry 270.

CHEM371 Biochemistry I/Lecture, Laboratory

See Biochemistry and Molecular Biology 271.

CHEM372 Biochemistry II/Lecture

See Biochemistry and Molecular Biology 272.

CHEM373 Principles of Molecular Modeling/Lecture

See Chemistry 273.

CHEM375 Protein Chemistry/Lecture

See Biochemistry and Molecular Biology 275.

CHEM379 Computer Biochemistry/Lecture

See Chemistry 279.

CHEM380 Research Conference/Seminar
Consists of reports on research and discussions of recently published work. Guest lectures, staff, graduate students/Offered every semester

CHEM381 Polymer Science/Lecture
See Chemistry 281.

CHEM389 Research Methods/Lecture, Laboratory
See Chemistry 289.

CHEM399 Independent Study
Offered for variable credit. Staff/Offered every semester

COMMUNICATION AND CULTURE

Program Faculty

Matthew Malsky, Ph.D. - *Director*
Parminder Bhachu, Ph.D.
Marcia Butzel, Ph.D.
Betsy P. Huang, Ph.D.
Fern Johnson, Ph.D.
Benjamin Korstvedt, Ph.D.
Sarah Michaels, Ph.D.
Rhys Townsend, Ph.D.
Jaan Valsiner, Ph.D.
Kristina Wilson, Ph.D.

Part-Time Faculty

Kevin Anderson, Ph.D.
Kirk Jalbert, M.F.A.
D. L. Stephenson, Ph.D.

Program Overview

The communication and culture major is designed to engage students in focused inquiry into the cultural foundations of communication in its various forms. As a liberal-arts major, the program of study emphasizes the development of a conceptual framework for understanding the role of communication in both transmitting and creating culture through practices of verbal and nonverbal communication. Through an interdisciplinary approach involving faculty from different fields of expertise in the humanities and social sciences, students study media, discourse and global influences and developments in communication.

The curriculum covers historical and current topics, and the range of communicative forms considered includes visual and graphic images, everyday discourse, literary works, journalistic writing, music and material productions. Although not a production-oriented or preprofessional major, students have opportunities for practicum and internship learning. The faculty is committed to providing the type of sound critical and conceptual grasp of communication that is essential for intelligent participation and leadership in the various fields of communication.

For details regarding the major, students should consult the Majors' Handbook, which is available online, in the Communication and Culture Program Office, and at the Academic Advising Center.

The major is organized into three paths of emphasis: (1) media dimensions, (2) discourse dimensions and (3) global dimensions, which includes courses in both media and discourse studies that emphasize some aspect of global communication. With the exception of the introductory course (COMM101), most courses are cross-referenced with the departments in which they originate.

Undergraduate Requirements

(11 course units minimum) Each student selects, in consultation with her or his adviser, a path of emphasis from the three available options. Within that path, students concentrate their elective courses and build further specialization through choices of advanced seminars and internships. No exceptions will be made to the structure listed below.

1. COMM101 Communication and Culture, 1 unit
2. Seven elective courses, 7 units (additional courses may be taken)
    - minimum of four and maximum of five must be in path of emphasis
    - minimum of three must be at the 200 level
    - maximum of two practicum courses, which must be in an approved sequence (optional)
3. One Integrative Seminar (200 level), 1 unit
4. Approved internship or project, 1-2 units
5. Senior Capstone Seminar or Project in path of emphasis, 1-2 units (Honors thesis option for qualified students.)

Students must complete COMM101 before taking the integrated seminar.

Course prerequisites are listed for specific courses and may be different for communication and culture majors than for students taking the course in the department from which it is cross-referenced. Students should consult semester schedules carefully to determine prerequisites.

Students must earn a grade of C or better in all courses contributing to the major program of study.

For more information about the communication and culture major, call 508-793-7180.

Courses

Introductory Course

COMM101 Communication and Culture

PATH 1: Media Dimensions
Electives in Media Dimensions:

Communication and Culture

COMM145 Do-It-Yourself Media
COMM168 Image Theory
COMM170 Computer Mediated Communication
COMM221 Media Policy and Democracy

Art History

COMM010 From the Stone Age to Our Age
COMM243 Design in the 20th Century: Arts & Crafts to Ikea
COMM245 Urban Art and Society in Jazz Age New York

English

COMM205 Culture and the News

Foreign Languages and Literatures

COMM206 The Work of Art and Cultural Criticism from Wagner to the Present

Geography

COMM258 Internet Geography

History

COMM211 American Consumer Culture

Music

COMM012 Music as Culture
COMM013 Pop Music in USA
COMM104 Music and Modernism
COMM108 20th-Century Music
COMM146 Recording Practice and Audio Art
COMM210 History of Music Seminar

Screen Studies

COMM103 Introduction to Screen Studies
COMM117 Factual Film and Television
COMM118 History of American Broadcasting and Electronic Media
COMM171 Storytelling through Video: Documentary and Dramatic Production
COMM214 Social and Cultural Issue Documentary
COMM235 Images of Youth
COMM261 Critical Perspectives of T.V. Culture

Sociology

COMM136 Effects of Mass Media

Studio Arts

COMM123 Intermediate Photography
COMM125 Graphic Design Projects
COMM208 Typography
COMM209 Introduction to Interactive Design
COMM250 Photography Studio
COMM254 Graphic Design Studio

PATH 2: DISCOURSE DIMENSIONS

Electives in Discourse Dimensions:

Communication and Culture

COMM150 Discourse and Cultural Studies: Field Research

Comparative Literature

COMM134 Latino Literature and Media Arts

Education

COMM020 Transformative Schooling: Culture, Community, Education and Society

English

COMM102 Documentary Writing
COMM114 American Talk
COMM196 Strategic Speaking
COMM202 Feature Writing
COMM204 Writing for Magazines
COMM215 Language and Culture in the United States
COMM248 Signs/Crossroads: Semiotics
COMM272 Ethnic America: Literary and Theoretical Perspectives
COMM279 Fictions of Asian America
COMM293 History of the English Language

Philosophy

COMM242 Philosophy of Language

Psychology

COMM158 Discourse, Subjectivity and the Self
COMM195 Psychology, Communication and the Self
COMM247 Theoretical Models of Communication in Psychology
COMM255 Gender Development and Language
COMM262 Narrative Perspective
COMM268 Communicative Development

Theater Arts

COMM212 Actor as Thinker

PATH 3: GLOBAL DIMENSIONS

Electives in Global Dimensions:

Communication and Culture

COMM246 Global Communication and the Spaces of Cultural Production

Art History

COMM159 Latin American Art
COMM164 The Arts of Asia
COMM165 The Arts of Islam
COMM239 Renaissance and Baroque/Seminar

Comparative Literature

COMM130 The National Imagination

Foreign Languages and Literatures

COMM129 Media Workshop in French
COMM144 Francophone Literature and Film
COMM138 Studies in Contemporary French Culture

Geography

COMM017 Culture, Place and the Environment
COMM137 Gender and Environment

Psychology

COMM156 Cultural Psychology
COMM157 Cultural Psychology of Urban Living

Screen Studies

COMM224 World Cinema and Global Culture
COMM263 Topics in French Cinema: Popular Genres, Block Busters and Remakes

Sociology

COMM160 Global Cultures and Identities
COMM278 The Creation of Nationalisms, Nationalist Culture and Symbols
COMM260 Roots and Routes

Integrative Seminars

Integrative seminars are courses at the 200 level that treat a particular topic through different disciplinary perspectives or that bring together two or more topics from different domains of communication and cultural analysis. These seminars are listed separately below. At least one integrative seminar is offered each semester and new topics may be added. Interested students may petition the director of the program to substitute a second integrative seminar for an elective course.

Integrative Seminar Courses

Art History

COMM216 Architecture and Democracy
COMM234 Converging Cultures in the Age of Discovery

English

COMM257 Language at Issue
COMM252 Cultural Discourses of Advertising

Music

COMM231 Soundtracks

Psychology

COMM251 Language Development

Sociology

COMM230 Sociology of Culture
COMM275 Culture, Consumption and Class in Local and Global Contexts

Senior Capstone

The senior capstone in communication and culture requires that each student participate in original research or creative activity or produce an individual project related to some aspect of his or her path emphasis. At the end of the junior year, majors receive information about options available for the senior capstone. Based on this information, each student selects one of the senior capstone seminars, proposes an independent study project or, if qualified, proposes an honors thesis project. All projects and theses must be supervised by a member of the communication and culture faculty. For honors theses, a second faculty member, who will serve as an evaluator, is selected through a consultation process between the student and his or her thesis adviser. Information regarding honors theses, which are yearlong projects, is contained in the Majors' Handbook.

Courses that have been offered as senior capstone seminars are listed below. New courses are added from time to time. Note that a student who takes a designated capstone seminar earlier than the senior year may count this course toward major elective requirements but may not use the course to fulfill the capstone requirement.

Senior Capstone Courses

English

COMM295 Gender and Discourse

Music

COMM274 Audio Culture

Psychology

COMM276 Advanced Topics in Cultural Psychology (Topic Dependent)

Screen Studies

COMM285 Film as Narration
COMM288 Gender and Film
COMM292 Capstone: ReViewing Disney

Sociology

COMM286 Media Effects Workshop
COMM294 Global Ethnographies

Communication and Culture Minor

The minor in communication and culture is designed to provide concentrated study in one of the three paths. The minor requires a minimum total of six course units as follows.

1. COMM101: Communication and Culture
2. Five additional COMM courses:
   - Three courses in one path of emphasis
   - One course in each of the other two paths of emphasis
   - Minimum of two 200-level courses
   - Maximum of one practicum course (beyond the introductory level)

Students must earn a grade of C or better in all courses contributing to the minor.

Courses

ARTH105 The Aegean World
See Art History 105.

COMM010 From the Stone Age to Our Age: Monuments and Masterpieces of Western Art/Lecture, Discussion
See Art History 010.

COMM012 Music as Culture/Lecture, Discussion
See Music 011.

COMM013 Pop Music in the USA/Lecture, Discussion
See Music 012.

COMM017 Culture, Place and the Environment/Lecture
See Geography 017.

COMM020 Transformative Schooling: Documentary Video for Social Change/First-Year Seminar
See Education 112.

COMM040 Cool/First-Year Seminar
What is 'cool'? – In this first-year seminar we will try to answer this question by developing a 'cool scale' – a measurement by use of which we can "measure" how cool people think they are. Constructing this scale will consist of developing scenarios that reflect aspects of 'cool' and testing them out empirically with a representative sample of participants. Parallel to the development of this methodological tool we will begin to address in a critical fashion what 'being cool' implies for people's overall well-being, whether 'cool' is a particular cultural (American?) emotional style, how it historically came to existence, and how it may be infiltrating other cultures in a globalizing fashion. Mr. Bamberg/Offered periodically

COMM050 Communication and Culture in Main South/ First-Year Seminar
This seminar covers the same content as COMM101 which is a requirement for the communication and culture major and minor. However, this course will be run as a hands-on, discussion-based seminar, with students doing original research and taking an active role in class discussion. All of the ideas and tools introduced in the course will be put to use in investigations of communication and culture in the Main South Neighborhood of Worcester. We will investigate local media, public art, and both formal and informal learning in the neighborhood. Seminar participants will have a chance to collaborate with neighborhood students on multimedia projects, contributing to a com-

munity-based Web site. The course will be interdisciplinary, drawing on psychological, anthropological, sociological, technological, aesthetic, cinematic, semiotic, and cultural studies points of view and methodologies. There will be a particular emphasis on the roles of talk, text, and image in social life and how they relate to power, access and equity in the world. Fulfills the Values Perspective.

COMM101 Communication and Culture
Examines the ways in which communication creates and represents ideology, social orders and cultural identities. Emphasis is on critical analysis of communication in contemporary society. Subjects include culture-based metaphor, nonverbal communication, advertising, print media and television. Staff/Offered every year

COMM102 Documentary Writing
See English 102.

COMM103 Introduction to Screen Arts
See Screen Studies 010.

COMM104 Music and Modernism in Society, 1885-1945/ Lecture, Discussion
See Music 104.

COMM108 20th-Century Musical Explorations/Lecture, Discussion
See Music 103.

COMM110 American Sign Language I
This course is an introduction to American Sign Language (ASL), a visual/gestural language used by deaf people in the United States and Canada. Students learn visual readiness skills to recognize and express spatial relationships and to use appropriate nonmanual signals, such as facial expressions and body movements. Course topics include communicative functions, vocabulary, grammar and cultural aspects of the deaf community. The course also covers functional communication to help students understand the needs and history of the Deaf as well as their community. Students learn the differences between American Sign Language and oral communication for the deaf. Please note this course is graded Pass/No Credit. Students are required to receive a grade of C- or better in order to receive credit for the course.
Mr. Dunn/Offered every year.

COMM114 American Talk/First-Year Seminar
See English 114.

COMM117 Factual Film and Televison
See Screen Studies 123.

COMM118 History of American Broadcasting and Electronic Media
See Screen Studies 122.

COMM123 Intermediate Photography/Studio, Lecture, Discussion
See Studio Art 121.

COMM125 Graphic Design Projects/Studio, Lecture, Discussion
See Studio Art 125.

COMM129 Media Workshop in French
See French 127.

COMM130 The National Imagination
See Comparative Literature 130.

COMM131 International Cinema Since 1968
See Screen Studies 124.

COMM133 Studies in Hispanic Culture/Lecture, Discussion
See Spanish 133.

COMM134 Latino Literature and Media Arts
See Spanish 134.

COMM135 Media and Society/Lecture, Discussion
See Sociology 135.

COMM136 Effects of Mass Media
See Sociology 136.

COMM138 Studies in Contemporary French Culture
See French 137.

COMM144 Francophone Literature and Film
See French 140.

COMM145 Do-It-Yourself Media
This course explores the genre of experimental film within two contexts: First, we will aim a critical eye toward the history and current articulations of this form of film, and second, students will utilize what they've learned by producing three of their own experimental videos. The course begins with an introduction to the genre, then explores experimental film/video according to three different categories: experimentation with narrative, experimentation with form, and experimentation with the line between fact and fiction. Students will emerge from this course with a solid foundation in the history and theory of experimental film/video as evidenced by their creation of video projects that utilize, reflect, and expand upon filmic examples of this highly creative and challenging form of cinematic art and expression.
Mr. Anderson/Offered periodically

COMM146 Recording Practice and Audio Art/Seminar
See Music 142.

COMM150 Discourse and Cultural Studies/Field Research
This course studies the nature of human communication, both in language and other sign systems (e.g., cultural artifacts, media and social interactions) within and across diverse cultures and social institutions. It focuses on tools for analyzing communication in context with reference to its psychological, social, cultural and political implications.
Ms. Michaels/Offered every year

COMM156 Cultural Psychology/Lecture, Discussion
See Psychology 156.

COMM157 Cultural Psychology of Urban Living/Lecture, Discussion
See Psychology 157.

COMM158 Discourse, Subjectivity and Self/Lecture, Discussion
See Psychology 158.

COMM159 Latin American Art/Lecture, Discussion
See Art History 159.

COMM160 Global Cultures and Identities/Lecture, Discussion
See Sociology 160.

COMM164 The Arts of Asia/Lecture, Discussion
See Art History 160.

COMM165 The Arts of Islam/Lecture, Discussion
See Art History 161.

COMM168 Image Theory

Image Theory is a course designed to dissect and analyze the role images play in the collective life of contemporary society. Within our ever-increasing utilization of modern medias such as photography, film, video and the internet to transmit image-based information, new relationships have transformed the way we communicate with other people as well as the way we receive, structure and learn new information. How has the image become the predominant method of communicating ideas? How do these images affect the way we experience and remember events? How does this exposure alter our own self-identity? Finally, how have visual artists used these image relationships to create powerful and lasting work? We will use these topics as a launching point to create, employ and analyze image-based communications of our own within these various contexts. Mr. Jalbert/Offered periodically

COMM170 Computer Mediated Communication

This course is intended to provide an introduction to those social functions and communities evolving from and developed around computer-aided technologies. Beginning with a definition of computer-mediated communication, students will progress through a meaningful discussion designed to plant them squarely as the focus of our study. How do THEY use these technologies and what is the effect on their lives? In addition to the standard foray of relevant readings and discussions, students will be asked to complete weekly assignments intended to submerge them in virtual spaces and online communities, as well as inter-student communication projects via portable devices, such as cell phones. Upon successful completion of the course, a student will have a better understanding of how technology affects the way they operate and communicate within their daily lives. Mr. Jalbert/Offered periodically

COMM171 Storytelling through Video: Documentary and Dramatic Production

See Screen Studies 171.

COMM195 Discourse, Self and Gender/First-Year Seminar

See Psychology 193.

COMM196 Strategic Speaking/Workshop

See English 196.

COMM202 Feature Writing/Workshop

See English 202.

COMM204 Writing for Magazines/Seminar

See English 204.

COMM205 Culture and the News/Lecture, Discussion

See English 205.

COMM206 The Total Work of Art and Cultural Criticism from Wagner to the Present/Seminar

See German 205.

COMM208 Typography

See Studio Art 208.

COMM209 Introduction to Interactive Design

See Studio Art 209.

COMM210 Seminar in Music History and Criticism

See Music 210.

COMM211 American Consumer Culture/Seminar

See History 211.

COMM212 Actor as Thinker/Studio, Lecture, Discussion

See Theater Arts 212.

COMM214 Social and Cultural Issue Documentary

See Screen Studies 214.

COMM215 Language and Culture in the United States/ Lecture, Discussion

See English 215.

COMM216 Architecture and Democracy/Seminar

See Art History 216.

COMM221 Media Policy and Democracy

In this course, students will look at the development of media regulation in the United States, starting with the founding of the Federal Communications Commission up to its most recent decisions on media policy. In addition to discussing the ways in which the legislation specifically addresses free-market competition, public interest and freedom of speech, we explore society's understandings of these issues and how they are shaped by policy. Students will also focus on the methods of the public-access television and radio movement in their attempt to produce media that serves public interest and gain some control of the corporately dominated airwaves. Staff/Offered periodically

COMM224 World Cinema and Global Culture

See Screen Studies 224.

COMM230 Meaning, Politics and Difference: Sociology of Culture/Lecture, Discussion

See Sociology 231.

COMM231 Soundtracks/Lecture

See Music 160.

COMM234 Converging Cultures in the Age of Discovery/Seminar

See Art History 232.

COMM235 Images of Youth

See Screen Studies 230.

COMM239 Special Topics: Renaissance and Baroque Art/Seminar

See Art History 239.

COMM242 Philosophy of Language/Lecture, Discussion

See Philosophy 242.

COMM243 Design in the 20th Century: Arts & Crafts to Ikea

See Art History 243.

COMM245 Urban Art and Society in Jazz Age New York

See Art History 245.

COMM246 Global Communication and the Spaces of Cultural Production

This course traces the historical development and uses of mass communications technologies in what is euphemistically, if not geographically, called the West. This course connects contemporary mass media development with Western European expansion in North America, South and Central America, Africa Asia, and the Middle East and the strategic deployment of Western European economic, political and cultural value systems to these geographically and politically constructed regions.

COMM247 Theoretical Models of Communication in Psychology/First Seminar

See Psychology 247.

COMM248 Signs and Crossroads: Semiotic Theory and Practice/Seminar
See English 249.

COMM250 Digital Imaging
See Studio Art 250.

COMM251 Language Development/First Seminar
See Psychology 251.

COMM252 Cultural Discourses of Advertising/Seminar
See English 252.

COMM254 Graphic Design Studio
See Studio Art 254.

COMM255 Gender Development and Language/First Seminar
See Psychology 254.

COMM257 Language at Issue/Seminar
See English 257.

COMM258 Internet Geography: Socioeconomic Impacts of Information Technologies/Lecture, Discussion
See Geography 257.

COMM260 Roots and Routes: Immigrants, Diasporas and Travel/Lecture, Discussion
See Sociology 260.

COMM261 Critical Perspectives on Television
See Screen Studies 261.

COMM262 Narrative Perspective in Psychology/Capstone Seminar
See Psychology 260.

COMM263 Studies In French Cinema
See Screen Studies 263.

COMM268 Communicative Development/Capstone Seminar
See Psychology 268.

COMM272 Ethnic America: Literary and Theoretical Perspectives/Seminar
See English 276.

COMM274 Audio Culture
See Music 200.

COMM275 Culture, Consumption and Class in Local and Global Contexts/Lecture, Discussion
See Sociology 250.

COMM276 Advanced Topics in Cultural Psychology/Capstone Seminar
See Psychology 276.

COMM278 The Creation of Nationalism, Nationalist Cultures and Symbols/Lecture, Discussion
See Sociology 255.

COMM279 Fictions of Asian America/Seminar
See English 279.

COMM285 Film as Narration
See Screen Studies 284.

COMM288 Gender and Film
See Screen Studies 288.

COMM291 Capstone Course
See Screen Studies 290.

COMM293 History of the English Language/Seminar
See English 294.

COMM294 Global Ethnographies: Ethnographers in the Making for the 21st Century/Seminar
See Sociology 294.

COMM295 Gender and Discourse/Seminar
See English 295.

COMM296 Capstone Course
See Screen Studies 291.

GEOG136 Gender and Environment/Lecture, Discussion
See Geography 136.

MUSC141 Computers and Music/Lecture, Discussion
See Music 141.

COMPARATIVE LITERATURE

Program Faculty

Belén Atienza, Ph.D.
Paul Burke, Ph.D.
Maria Acosta Cruz, Ph.D.
William Ferguson, Ph.D.
Marvin D'Lugo, Ph.D.
Odile Ferly, Ph.D. (sabbatical)
Everett Fox, Ph.D.
Beth Gale, Ph.D.
Michael Spingler, Ph.D.

Adjunct Faculty

Marcia Butzel, Ph.D.
SunHee Kim Gertz, Ph.D.
Benjamin Korstvedt, Ph.D.
Gary Overvold, Ph.D.

Emeriti Faculty

Kenneth Hughes, Ph.D.
Hartmut Kaiser, Ph.D.
Dorothy Kaufmann, Ph.D.
Walter Schatzberg, Ph.D.

Program Overview

Comparative literature is a wide-ranging, multicultural program of studies in poetry, prose, drama, film and related arts. Housed in the Foreign Languages and Literatures Department, the program is by nature interdisciplinary and has strong ties with other departments in the University. In addition to the courses offered by the department in comparative literature and literatures in foreign languages, the student is encouraged to take courses in English, history, philosophy, and visual and performing arts. One of the special aspects of the program is the emphasis on developing a practical and critical approach to texts. This may take the form of play production, seminars in translation of lyric poetry and drama, and supervised work in contemporary critical theory (i.e., relations between text and performance, spectator positioning and reader response).

Undergraduate Requirements

1. Any two courses in a foreign language at the intermediate level (courses 105 and 106, except Greek or Latin where elementary will be accepted), or above or its equivalent as determined by the major's adviser.
2. Demonstration of a reading knowledge of a foreign language, as determined by either completion of a literature course in a foreign language or by the instructor or major adviser.
3. Eight courses in literature, film or related arts, to include: (a) one foundation course in comparative literature, such as "Shock of the New" or "Journeys" (b) CMLT130 National Imagination, (c) a senior directed (capstone) study project.

Courses

CMLT112 Fairy Tales of the World/Lecture, Discussion, First-Year Seminar
See French 112.

CMLT117 Reading the Narratives of the Hebrew Bible/ First-Year Seminar
See Jewish Studies 117.

CMLT118 Introduction to the Hebrew Bible II: Prophecy and Poetry/Lecture, Discussion
See Jewish Studies 118.

CMLT120 The Epic Journey/Lecture, Discussion
A comparative and cross-cultural examination of the epic as a recurring literary form. Special attention is paid to the various forms and functions of the hero's journey. Defines and articulates the various types of epic voyage and relates their differences and similarities to the values of the societies that gave rise to them. Included in the term's reading are selections (in English translation) from Homer's Odyssey, Vergil's Aeneid, Apollonius' Argonautica and Apuleius' Ass. Mr. Burke/Offered every other year

CMLT129 Shock of the New: Revolution in Hispanic Culture/ First-Year Seminar
Explores the ways in which the arts (literature, cinema and painting) are both transformative and transformed by major changes in ideology, science and technology, psychology and society at large. Shock and change also happen when cultures contact and collide. Examples of topics covered in this course could be: the birth of cinema, the influence of Marxism in figures like Che Guevara, Fidel Castro and Pablo Neruda, Freud's influence in Dali and the surrealists, Frida Kahlo as a feminist icon, and Africa's influence on Picasso. Different topics and periods will be covered each semester. Taught in English. First-year seminar. No prerequisites; restricted to first-year students. Ms. Atienza/ Offered periodically

CMLT130 The National Imagination
This course explores the concept of a national community as constructed and critiqued through literary and cinematic narratives, as well as other cultural texts. Special emphasis is given to the ways in which national languages have been used to promote the sense of cultural continuity and identity for various national communities. Variable content. This is a team-taught course with national focus changing depending upon the participation of particular members of the foreign languages faculty. Staff/Offered every spring

CMLT134 Latino Literature and Media Arts
See Spanish 134.

CMLT136 Existentialism in Philosophy, Literature and the Human Sciences/Lecture, Discussion
See Philosophy 135.

CMLT150 Journeys with Hyphenated Americans: Emerging Identities, Evolving Cultures/First-Year Seminar
The American "melting pot," once a national myth, has now become a cultural cliché often derided by contemporary ethnic communities. Forged largely around the migration of Europeans to the United States in the early 20th century, that fiction of national identity has since been rewritten and transformed through works that reflect the experiences of men and women who have come from non-European backgrounds: Native Americans, African Americans, Latinos, and Asian Americans. This seminar traces some of the shifts in these stories of migration in both fiction and film, in works ranging from the uplifting autobiographies of European immigrants at the beginning of the 20th century to Robert Rodriguez's irreverent Chicano movie, Spy Kids, at the century's end. In debunking the melting pot, writers and filmmakers have produced a highly imaginative and yet subversive countermythology that forces us to reconsider many of the commonplaces about American cultural identity. Fulfills the Verbal Expression requirement. You must have been placed at the Verbal Expression level to select this seminar. Mr. D'Lugo/Offered periodically

CMLT151 Introduction to Medieval Literature/Lecture, Discussion
See English 150.

CMLT174 Islands in the Stream: Puerto Rico and the French Antilles
An examination of Hispanic and French cultures in the Caribbean, with a specific focus on Puerto Rico and the French Antilles. The course begins with an analysis of theoretical issues of colonialism, postcolonialism and neocolonialism in the region, and follows with an exploration of specific issues such as assimilation, acculturation and alienation. The course then examines the notions of race, gender, language and nationhood through cultural production within and outside of the islands. Ms. Acosta Cruz and Ms. Ferly/Offered periodically

CMLT180 Japanese Culture and Literature in Translation/ Lecture, Discussion
See Japanese 180.

CMLT190 Japanese Women Writers
See Japanese 190.

CMLT205 The Play and its Stages/Seminar, Workshop
A critical approach to the dramatic text based on historical and material conditions of performance. Considers the changing ways that meanings are made through styles and conventions of performance (including set, costume, mask and vocal delivery), which are specific to historical and cultural moments. Playwrights considered may include Sophocles, Shakespeare, Racine, Molière, Chekhov, Ibsen, Brecht, Genet and Beckett. Scene work. Mr. Spingler/Offered periodically

CMLT206 Languages of Theater/Seminar, Discussion
A study of the way meanings are made in theater through structure and sign. Examines the function of nonverbal communication in theater, especially mask, gesture, movement and sound. Plays may include works of Euripides, Shakespeare, Cocteau, Apollinaire, Jarry, Genet and Pinter. Critical works read include Artaud's "The Theater and its Double," Brook's "The Empty Space" and Grotowski's "Towards a Poor

Theater." Scene work. May be taken as a companion course to CMLT205. Mr. Spingler/Offered periodically

CMLT208 Her Story: History and Fiction of Caribbean Women Writers
Traces the history of the Caribbean through contemporary women's writing from the Anglophone, Francophone and Hispanic areas. Examines the portrayal of Caribbean women from slavery and colonial times to the present day, and the depiction of women's participation in the construction of their past. Authors studied include Julia Alvarez, Maryse Condé, Edwidge Danticat, Jamaica Kincaid, Jean Rhys and Mayra Santos. Ms. Ferly/Offered every other year

CMLT210 Modernism in Philosophy, Literature and the Arts/ Lecture, Discussion
See Philosophy 210.

CMLT246 Studies in Spanish Cinema
See Spanish 246

CMLT248 Studies in Latin American Cinema/Lecture, Discussion
See Spanish 248.

CMLT 249 Studies in Hispanic Cinema
See Spanish 249

CMLT250 Medieval Literature/Seminar
See English 250.

CMLT254 Still Spaces–East Meets West: Contemplative Practice in the Classroom/Seminar
See English 254.

CMLT256 No More Classrooms, No More Books: Education in 20th-Century French Novel and Film
See FREN256. Taught in French. Prerequisite: 131 and another course at the 130 level or above in French, or permission. Ms. Gale/Offered periodically

CMLT264 Writing and Identity in the Francophone Caribbean
See French 264.

CMLT288 Art of the City: Paris and New York/Discussion
A comparative structural and cultural analysis of two urban designs, Haussmann's Paris and Olmsted's New York, the visual representation of the two cities and the literary interpretation of the cities. The cities will be considered as theaters in which cultural meanings are produced through spatial composition and performances in the set. Among the questions to be explored is the matter of cultural kinships and differences between France and the United States. Prerequisite: Permission of instructor. Mr. Spingler/Offered periodically

ENG249 Signs and Crossroads: Semiotic Theory and Practice/Seminar
See English 249.

ENG294 History of the English Language/Seminar
See English 294.

FREN140 Francophone Literature and Film
See French 140.

FREN160 French Culture Seen Through Film: Jean Renoir/ Lecture, Discussion
See French 160.

FREN211 Spirited Rebellion: Adolescence French Novel and Film/Lecture, Discussion
See French 211.

JS123 The Midrashic Tradition/Lecture, Discussion
See Jewish Studies 123.

SCRN121 International Cinema to 1968
See Screen Studies 121.

SCRN288 Gender and Film
See Screen Studies 288.

SPAN246 Studies in Spanish Cinema/Lecture, Discussion
See Spanish 246.

SPAN249 Studies in Hispanic Cinema/Lecture
See Spanish 249.

COMPUTER SCIENCE

Program Faculty

Frederic Green, Ph.D. - *Chair*
Jerry Breecher, Ph.D.
Arthur Chou, Ph.D.
Li Han, Ph.D.
David Joyce, Ph.D.
Ping Xuan, Ph.D.

Program Overview

The department views computer science as an academic discipline firmly rooted within Clark University's liberal-arts tradition, with an emphasis on the science of designing software and hardware. Courses emphasize concepts and principles; at the same time, the program closely follows ACM guidelines for university computer science. The major provides preparation for a variety of career paths, both inside and outside the academic community. Two courses in fundamentals of computer science and one course in discrete mathematics serve as general introductory courses. Four intermediate courses (core requirements) expose the principles of computer science. One year of calculus is required and should be completed as soon as possible, if at all possible by the end of the sophomore year. Beyond this, a series of elective courses is offered in which applications and advanced topics are explored. Further information, including expanded course descriptions, can be found on the department's Web site.

Undergraduate Requirements

Students should note that CSCI110 Diving Into Research does not count towards the computer science major.

Introductory Courses

These courses are prerequisites for the advanced courses and should be taken as soon as possible.

CSCI120 Introduction to Computing
CSCI121 Data Structures
MATH114 Discrete Mathematics

Calculus

- One year of calculus.
- MATH 120, 121 Calculus I, II or MATH124, 125 Honors Calculus I, II.

This sequence should be complete as soon as possible; we recommend by the end of the sophomore year.

Core Courses

CSCI140 Assembly Language and Computer Organization
CSCI160 Algorithms
CSCI170 Analysis of Programming Languages
CSCI180 Automata Theory

Advanced Courses

Four courses in computer science at the 200 level, not including internships or reading courses except with departmental approval. (Total: 13 courses)

Declaring a Major

The department has a system of advising to assist students with their course selections. Department faculty are eager to help students select courses. A major must be declared no later than the second semester of the sophomore year; earlier declarations are encouraged. Students should choose an academic adviser from the department faculty as early as possible or at least by the time the major is declared.

Entering students enrolled in first-year seminars in programs outside mathematics, computer science or the natural sciences are especially encouraged to make a prompt choice of an unofficial secondary adviser in the Computer Science Department, who will be able to supplement the advice offered by their primary adviser.

Suggested Program Sequence

It is important to begin the computer science program early. An ideal program sequence begins with CSCI120 Introduction to Computing in the fall of the first year, followed by CSCI121 Data Structures and MATH114 Discrete Mathematics in the spring semester. A calculus sequence (MATH120, 121,or MATH124, 125) should be taken starting in the first year if possible, and in no case later than the second year. The four core courses should be taken as soon as possible.

The three mathematics courses required for the computer-science major are meant to ensure that all students will have the mathematical tools, which are indispensable for the study of computer science. MATH114 is a direct or indirect prerequisite for essentially all intermediate and advanced computer-science courses, and should be taken as early as possible by any student who may be interested in computer science. If it is not possible for a student to take both MATH114 and Calculus during the first year, preference should be given to MATH114.

Reading Courses

Reading courses on special topics may be arranged with the permission of a member of the departmental faculty who will serve as supervisor. Departmental policy requires that a reading course can only be taken Pass/No Credit. Reading courses may not be substituted for 200-level courses to fulfill departmental requirements.

Bioinformatics for CSCI Majors

By taking a sequence of courses like CSCI120-121, CSCI160, CSCI210 (or CSCI 212), MATH 114, and appropriate biology courses, a CSCI major can add a bioinformatics concentration.

Honors Program

A major who maintains at least a 3.2 average (4.0 scale) in courses required for the major may apply for the departmental honors program. A student's application in writing must be directed to a prospective honors adviser or the department chair by the end of the student's junior year. Honors may be achieved in one of two ways: (1) a unified four-course sequence as a senior (some parts of which may consist of directed readings) followed by a comprehensive examination; or (2) an honors project to be presented at an oral defense or at a department seminar. This project may be an independent or joint research thesis, or it may be a programming project. Supporting course work may be required. Students interested in pursuing the honors program should consult their department adviser. The student registers for CSCI299, Sec. 8, for course credit for an honors thesis. Upon satisfactory completion of the program, the department may recommend graduation with honors, high honors or highest honors.

Computer Science Minor

A minor in computer science consists of six courses: CSCI120-121 Computer Programming I and II, and four other courses in Computer Science (although MATH114 Discrete Mathematics may substitute for one), at least one of which is at the 200 level.

Here are some sample minors in computer science:

- Software sequence: CSCI120-121, MATH114, CSCI160, 170 and 250.
- Applications sequence 1 (Graphics and Robotics): CSCI120-121, MATH114, CSCI160, CSCI260 and CSCI265.
- Applications sequence 2 (Computer Architecture and Networking): CSCI120-121, MATH114, CSCI160, CSCI240 and CSCI280.
- Theory sequence: CSCI120-121, MATH114, CSCI160, CSCI180 and CSCI270.

Courses

CSCI099 COMPUTERS IN OUR WORLD/LECTURE, LABORATORY

An introduction to computer technology with an emphasis on social implications where applicable. Lectures will survey topics such as history of computer development from number-crunchers to information-management systems, how computers work, networking protocols including the Internet and World Wide Web. Additionally, the course will explore data representation and programming. Students will learn binary algebra and develop two or three short programs. A laboratory component will give students hands-on experience with software applications, which demonstrate the possibilities enabled by current computer technology. There are no prerequisites; no prior computer experience is necessary. Not applicable to the major requirements in computer science. Staff/Offered periodically

CSCI100 ART AND COMPUTING

Computer programming is, in a sense, an art. But computer programs are increasingly being used to create art in the more conventional sense. This course introduces the student to the essential ideas of computer science, and some simple applications of elementary geometry, through the medium of visual computer programming using the programming language Processing. All programs created in this course will have a visual, aesthetic aspect to them, and most will be interactive in some way. The computer is used as a means of creating artistically and/or scientifically interesting images and animations. At the same time, the underlying formalism governing the programs will be explained in increasingly greater detail as the course progresses, until the student has a good grasp of the major components of computer programming (problem solving, design and coding) by the end of the course. This course fulfills the Formal Analysis requirement.

CSCI110 Diving into Research: Making Your Own Computer Games
Ever wonder what it is like to create your own computer games? Then experience it here first-hand. We will study games, game-design principles, and related computer science fields, survey and use game-making software, learn the pipeline process of game-making and the techniques for game creation and push the creative possibilities of computer game design. Students in this group will engage in hands-on game-making activities to create their own computer games, research the concepts, means and tools for game making, and exercise problem solving skills. Note: the yearlong course is 0.5 credit per semester, and the full year is necessary to obtain credit. CSCI 110 does not satisfy any requirement of the CSCI major.

CSCI111 Diving into Computer Science Research/Seminar
See CSCI110.

CSCI115 Introduction to Computing for Scientists
Computers are becoming an increasingly important aspect of the biological, physical and social sciences, whether we use them as part of an existing instrument, whether we're building new equipment, or whether we need to build new software. This course will talk about the limits of computing – what they can do and what they can't do. It will explore how to program so that a student can build new applications of interest in a scientific field. The course will include a project, designed by the student, of use in her/his major. Previous experience in computing is not required, but it is expected that the student will have good logic and analysis skills. Preference will be given to first- and second-year students – upperclass students only by permission of the instructor. This course can be used as a prerequisite for CSCI121 or BINF101. Fulfills Formal Analysis requirement. Staff/Offered periodically

CSCI120 Introduction to Computing/Lecture, Laboratory
An introduction to computer science, with a focus on the top-down approach to problem solving and computer programming in Java. Algorithms are developed for the solutions to stated problems, then translated into Java and tested on the computer. For the laboratory component, students are expected to write approximately seven programs throughout the course. Specific topics include decision making, logic design, iteration, arrays, and object-oriented design. Fulfills the Formal Analysis requirement. No prerequisites. This course is a prerequisite for most higher-numbered computer-science courses. Although this course is continued in CSCI121, for many students it can stand on its own as a viable introduction to computer science. Mr. Chou, Mr. Green, Ms. Han, Mr. Joyce, Staff/Offered every semester

CSCI121 Data Structures/Lecture, Laboratory
A continuation of CSCI120, with an emphasis on such topics as abstract data types, collections, and dynamic data structures such as linked lists, stacks, queues and binary trees. The usage and implementation of recursion is also discussed, as is the elementary analysis of algorithms. Approximately six programming projects are assigned as the laboratory component of the course. These projects entail the design and implementation of programs involving the topics mentioned above. Prerequisite: CSCI120. Mr. Chou, Mr. Green, Ms. Han, Mr. Xuan/Offered every semester

CSCI140 Assembly Language and Computer Organization/Lecture, Laboratory
Covers fundamentals of assembly language programming such as data representation, the instruction set, addressing mode, macros, procedures, input and output facilities, assembler and linker, introduction to logic circuits and the basic machine organization of conventional computers. The goal is to understand how a computer performs various tasks that are completely hidden from the user in a high-level language. For the laboratory component, students will write several programs in assembly language. Prerequisites for this course require a grade of C or better. Prerequisite: CSCI121. Mr. Chou, Mr. Breecher/Offered every year

CSCI160 Algorithms/Lecture, Discussion, Laboratory
Emphasizes how the design of algorithms is supported by advanced data structures such as sets, trees and graphs. Applications to searching and sorting are discussed. Topics include: design and analysis of algorithms, general trees, balanced trees, priority queues, hash tables, merge-sort, quick-sort, radix sorting and searching, and elementary graph algorithms. Programming projects are assigned for the laboratory component. Prerequisites for this course require a grade of C or better. Prerequisites: CSCI121 and MATH114. Mr. Chou, Mr. Green, Ms. Han/Offered every year

CSCI170 Analysis of Programming Languages/Lecture
Deals with the issues of the design and implementation of programming languages from both the syntactic and the semantic point of view. Topics include: the representation of rules of syntax, using context-free grammars, parsing, semantic constructs, control structures, implementation of procedures and parameters, implementation of recursion and an introduction to the organization of compilers. A typical group term project may be to design and implement a compiler or interpreter for the actual implementation of some language. Prerequisites for this course require a grade of C or better. Prerequisites: CSCI121 and MATH114. Mr. Xuan, Mr. Green/Offered every year

CSCI180 Automata Theory/Lecture, Discussion
Studies the abstract models of machines and languages recognized by them and introduces the concept of computability. Begins with a review of sets, functions and relations, then continues with finite automata and regular languages, pushdown automata and context-free grammars, grammar transformations and normal forms, and finally the mathematical model of modern computers: Turing machines and computable functions. Some examples of unsolvable problems, such as the halting problem, will be discussed. Involves a fourth-hour problem-solving session. Prerequisites for this course require a grade of C or better. Prerequisites: CSCI121 and MATH114. Mr. Chou, Mr. Green, Ms. Han, Mr. Joyce/Offered every year

CSCI201 Proseminar In Computer Science/Seminar
The presentation of topics in computer science by and for senior undergraduates. These presentations acquaint students with diverse subjects, introduce them to researching known topics and give them practice in presenting material to their peers. Faculty members will also present some research topics. Possible areas the topics may be drawn from might include robotics, networking, NP complete problems, neural networks, expert systems, parallel algorithms. Prerequisites for this course require a grade of C- or better. Prerequisites: CSCI160 and CSCI170. Staff/Offered periodically

CSCI210 Artificial Intelligence/Lecture, Laboratory

Focuses on the fundamental ideas of artificial intelligence and programming in Lisp. Topics included are knowledge representation schemes, problem representation through explicit models, search techniques, analogy and pattern recognition, natural language parsing and planning. Students implement the above ideas through computer programs written in Lisp. Language instruction is provided in Lisp (or Prolog), although no prior knowledge of these programming languages is assumed. Prerequisites for this course require a grade of C- or better. Prerequisite: CSCI160. Mr. Xuan/Offered every year

CSCI215 Operating Systems/Lecture, Laboratory

Studies the structure, performance and design of operating systems. Topics include concurrency, deadlocks, scheduling and memory management. Various operating systems may be examined and compared. Students will design and implement parts of operating systems. Prerequisites for this course require a grade of C- or better. Prerequisite: CSCI160. Mr. Breecher, Mr. Green/Offered every other year

CSCI220 Database Management and Systems Design/Lecture

An advanced course on the realities of database technology. Emphasizes the goals of database management: performance, data integrity, future compatibility and versatility. The concept of the data model is examined and a specific database is discussed. Concentrates on database design and specification. Prerequisite: CSCI160. Mr. Chou, Mr. Xuan/Offered every other year

CSCI230 Compiler Design/Lecture, Laboratory

A continuation of CSCI180 Automata Theory. It uses the automata and grammars introduced in CSCI180 to design translators (compilers) for programming languages. Topics include lexical analysis, top-down parsing, bottom-up parsing, syntax-directed translation, type checking, run-time environment, code generation and an introduction to code optimization. A typical term project is to write a compiler for a simple programming language such as a subset of C or Pascal. Prerequisites for this course require a grade of C- or better. Prerequisites: CSCI160 and CSCI180. Mr. Chou, Mr. Green/Offered every other year

CSCI240 Computer Architecture/Lecture

A study of the design of computers. Topics include the design of combinatorial and sequential circuits, design methodology of a basic computer, central processor organization, microprogramming, memory organization, input-output organization and arithmetic processor design. As time permits, further topics, such as vector and parallel processing, are discussed. A functional, logical (theoretical) approach is adopted. PHYS219 Electronics Laboratory is recommended so that students gain hands-on experience with computer chips. The science of design is stressed together with the existing machines. Prerequisites for this course require a grade of C- or better. Prerequisite: CSCI140. Mr. Breecher/Offered every other year

CSCI250 Software Engineering/Seminar

Students consider the life cycle of large software projects, beginning with the elicitation and definition of users' requirements and continuing through software design, documentation, coding, testing and maintenance. Topics include: modularity, coupling, cohesion, transformational and transactional structures and testing strategies. Working in teams, students gain practical experience developing software to solve concrete problems. Prerequisites for this course require a grade of C- or better. Prerequisites: CSCI160 and CSCI170. Mr. Breecher, Ms. Han, Mr. Xuan/Offered periodically

CSCI260 Computer Graphics

This course provides an introduction to computer graphics with an emphasis on the underlying theory and on the use of the graphics library OpenGL as application programming interface (API). We will study the theoretical foundations and algorithmic issues in class and will learn and use OpenGL as the particular API for writing graphics programs in programming assignments. Prerequisites for this course require a grade of C- or better. Prerequisites: Data Structures and Algorithms (CSCI160) and familiarity with matrix algebra (MATH130), or instructor's permission. Ms. Han/Offered every other year

CSCI265 Robotics/Lecture, Laboratory

This course presents an introduction to robotics. In addition to algorithmic issues, the course will cover related engineering and system topics and discuss current research problems. Topics covered include hierarchical paradigms, biological foundations, robot actuators and sensors, sensing techniques, kinematics, and dynamics, control, localization and motion planning. Students will get hands on experience through computer simulation or physical experiments with robot project-component kits. Prerequisites for this course require a grade of C- or better. Students should be interested in geometric concepts and algorithms and have good programming skills. Prerequisites: Algorithms (CSCI160) and familiarity with matrix algebra (MATH130), or instructor's permission. Ms. Han/Offered every other year

CSCI270 Theory of Computation/Lecture

Studies the nature and formal models of computation (by computers), its power and limitation (computability versus uncomputability), the computational complexity of various problems and the applications in logic and computer science. Turing machines, general recursive functions and other standard models of computation are introduced. Other aspects of recursion theory, such as unsolvable problems and recursively enumerable languages, are introduced. We also address the more practical question, "What is an efficient program?" in an introduction to modern complexity theory. Prerequisites for this course require a grade of C- or better. Prerequisite: CSCI180. Mr. Chou, Mr. Green/Offered every other year

CSCI280 Computer Networks/Lecture, Laboratory

Provides an introduction to the theory and practice of the design of computer and communications networks. The TCP/IP Model will be used as the framework with the course progressing through the physical, data link, network and transport layers. Analysis of network topologies and protocols, including performance analysis, is treated. Current network types including local-area and wide-area networks are introduced, as are evolving network topologies. Laboratory exercises include the design and implementation of projects such as simulation of the network/transport layer functions, routing, congestion control, an Ethernet controller, applications using TCP/IP or remote procedure calls. There may be extensive network programming assignments. Prerequisites for this course require a grade of C- or better. Prerequisite: CSCI160. Mr. Breecher/Offered every other year

ECONOMICS

Program Faculty

Wayne Gray, Ph.D. - *Chair*
Sang Hoo Bae, Ph.D.
Madhavi Bokil, Ph.D.
John Brown, Ph.D.
Myles Callan, Ph.D.
Jacqueline Geoghegan, Ph.D.
Amy Ickowitz, Ph.D.
Maurice Weinrobe, Ph.D.
Junfu Zhang, Ph.D.

Research Faculty

Daniel Bernhofen, Ph.D.
Attiat Ott, Ph.D.

Emeriti Faculty

Howard W. Nicholson, Ph.D.
Frank Puffer, Ph.D.
Roger C. Van Tassel, Ph.D.
Emiel C. Veendorp, Ph.D.

Program Overview

Economics offers a flexible yet consistent framework for understanding key issues facing the economy and society—from globalization of international trade and finance to global warming. The major and minor in economics offer students an opportunity to learn the key elements of this framework and provide them with ample opportunities to apply it to a wide range of key economic issues. The Ph.D. program enriches the intellectual community in economics with opportunities for undergraduates to take advanced courses not typically available to undergraduate majors.

Since it first attempted to explain the growth and wealth of nations more than 200 years ago, economics has evolved into a modern social science that combines a coherent analytical framework with careful analysis of information to understand how economies work and develop, and the consequences of economic policies and policy change. It applies the basic logic of individual choice and market forces to explore the tradeoffs inherent in addressing many of the key concerns on today's agenda: ensuring rising living standards in developed and developing countries, assessing the impacts of international trade, and identifying the wisest use of scarce environmental resources, among many others.

The major in economics builds on the expertise the student develops in the introductory courses. It combines a solid background in the core of economic analysis with a wide range of applied courses that investigate fields of economics and important topics. The capstone experience, honors program, internships and study abroad offer opportunities for majors to acquire research experience, apply economics in government or business and deepen their understanding of economic issues.

The economics major provides skills that are highly valued in a number of careers and graduate programs. The economics major emphasizes developing skills of careful thinking and analysis in combination with the application of those skills in practical settings. Law schools welcome the background economics provides in logical thinking. Government agencies and graduate programs in public policy or economics appreciate the systematic approach to understanding the economy offered by economics. Business schools and businesses find the facility the economics major acquires in analytical thinking and quantitative methods of analysis attractive.

Undergraduate Requirements

The requirements for the major include 12 courses: five required core courses in quantitative methods and economic theory; five elective courses in economics; and two related courses in fields outside of economics. A course including a capstone experience must be taken during the senior year. Majors must have a grade-point average of 2.0 for the 10 required economics courses, and a grade of no lower than C- in the five core courses.

Upon declaring the major, students also choose an adviser from among the economics faculty. Students are encouraged to use their initial meetings with their adviser to develop a program that meets their interests and goals. For example, a student concerned about environmental change and developing countries may combine course work in Environmental Economics (ECON157 or ECON257) with Population Economics (ECON247) and Economic Development (ECON128 or ECON 228). Students planning on graduate work in economics should consult their adviser early on. Graduate work in economics demands strong mathematical skills, including calculus and other courses in math.

The Undergraduate Economics Handbook provides many detailed suggestions on how students can tailor their major to their interests and career goals including a worksheet for planning the program in the major.

Core Courses

The five core courses provide students with a common language and a common set of skills that ensure preparation for study of the subfields of economics in the elective courses. They also enhance the student's understanding of economic analysis. ECON010 provides an introduction to the economic way of thinking using a comparative approach. First-year students may elect a first-year seminar (ECON100) that provides an in-depth look into key economic issues, such as international economic relations or population, in place of ECON010. Either of these courses is the prerequisite for all 100-level courses and ECON011. ECON011 provides an overview of the key analytical tools of economics and is the prerequisite for 200-level courses.

Courses in intermediate microeconomics (ECON205) and intermediate macroeconomics (ECON206) deepen the major's understanding of the economic analysis of individual and firm choices, markets, and the economy as a whole. Course work in statistical analysis (ECON160) acquaints students with how information can be used to confront hypotheses suggested by basic economic analysis. A minimum grade of C- must be earned in each of the required core courses.

Economics Electives

The five economics electives and the two related courses provide the student with the opportunity to pursue more focused interests within the major. Courses at the 100-level, generally provide students with an in-depth look at economic institutions and policies. Courses at the 200 level, which require completion of ECON011, provide a more comprehensive introduction to the economic literature of an area. Economics majors are required to take at least three of their electives at the 200 level.

Elective offerings include such fields as international trade and finance, economic development, monetary economics and labor, as well as topical courses in areas such as environmental economics, the economics of population, economic history and the economics of sport.

Students are encouraged to group their electives around their own particular interests. Brochures available from the department provide detailed suggestions on the appropriate economics electives and related courses for students with interests in international economics, development and the environment.

Related Courses

Economics majors must complete two courses that are offered outside of the Economics Department, which are related to the goals of the economics major. Some courses that will satisfy the related course requirement include math courses at the level of calculus or above; management courses in accounting, finance, management and information systems (MIS); and operations management; computer-science courses; and some courses in economic geography.

Other courses can meet this requirement provided they complement the program a student has developed. For example, many courses in international development would provide background for a student who has taken Economic Development (ECON128 or ECON228), or a student with an interest in economic policy may want to take additional courses in government. The departmental faculty adviser can provide suggestions for related courses of this type.

Capstone

Taken during the student's senior year, a capstone course is required. This offers an opportunity to draw upon the skills and background acquired during the previous years of study. The capstone courses allow students to acquire in-depth knowledge of a topic of interest using a combination of economic analysis and empirical research. The capstone course counts as one of the five economics electives.

There are three ways of meeting the capstone requirement:

a) Participation in the honors program (see below)

b) 200-level economics research course

c) Independent study course. For students unable to meet the capstone requirement through (a) or (b), arrangements can be made for individually directed research work.

Students must submit the capstone declaration form with the instructor's signature to the Economics Department when enrolling in a course that they have designated as their capstone.

Honors Program

Economics majors with outstanding academic records (a GPA of 3.4 in economics courses, 3.0 overall) may apply to pursue departmental honors. To receive departmental honors, a student must successfully complete an honors thesis. Prospective candidates for honors should develop a proposal for the thesis and identify a faculty supervisor during the second semester of the junior year. During the fall of the senior year, the students will enroll in ECON297 Honors. The student then writes a thesis under the direction of a faculty supervisor. During the spring of the senior year, the thesis is evaluated by the department for possible departmental honors.

Economics Minor

Students majoring in another discipline often discover that a minor in economics can provide a background that can complement their major and allow them to explore an interest in economics. The minor requires a minimum of six courses in economics including ECON010 and ECON011. Two of the remaining courses must be at the 200 level. Only courses with a final grade of C– or better will be counted toward the minor.

Graduate Program

Clark University offers a unique program of graduate study and research leading to the Doctor of Philosophy in economics. The economics faculty provide students with an excellent opportunity for qualified students to develop proficiency in economic theory, econometrics and their chosen fields of specialization. The design of the Ph.D. program emphasizes that students acquire experience carrying out independent research. The collegial size of the program ensures students ample opportunities to work with faculty.

Requirements

The requirements for the Ph.D. include a core of four courses in economic theory and three in mathematical economics and econometrics; qualifying examinations in microeconomic and macroeconomic theory; completion of two fields of the student's choice; completion of two elective courses; and the dissertation. Where appropriate, graduate students may elect to take a limited amount of work in related courses offered by other departments. At least two full academic years of graduate work or the equivalent in part-time work in residence at Clark are required. Some teaching and research experience at Clark, or other such teaching and research as the department may regard as equivalent, is strongly encouraged.

Ph.D. students can satisfy the requirements for econometrics and mathematical economics by passing designated courses offered in the department, or in the case of prior preparation, by passing a test given by the department. The student meets the economic theory requirement by satisfactory completion of the theory courses ECON301, 302, 303 and 304, and by passing two qualifying examinations, one each in microeconomic theory and macroeconomic theory.

Field courses begin in the second year, and are completed by the end of the third year. Each field consists of two to three semesters of course work. A student must designate a major field of specialization, in which a field paper is written and subsequently presented in the department seminar series, as well as completing a minor field of specialization. The Clark program regularly offers specialization in four fields, usually with two fields offered each academic year: international economics (ECON307, ECON308), applied econometrics (ECON366a/b), development economics (ECON328, 329) and applied spatial analysis (ECON357, ECON377 and ECON359). Other fields are occasionally offered and it is possible to combine related courses into a field, subject to the approval of the Director of Graduate Studies. Students must take both the major field and the minor field within the Economics Department. Successful completion of each field requires a passing grade (minimum of B-) in all field courses and completion of any other requirements designated by the professor responsible for the field. The topic for the field paper is to be determined with the approval of the professor responsible for the major field, and the completed field paper must be presented in the department seminar series within the following academic year.

The Ph.D. also requires one to two elective courses, which may be completed outside of economics. Elective courses within economics may be either stand-alone electives or be taken from an Economics Department field-course sequence that a student is not declaring as either a major field or minor field. Elective courses taken outside the Economics Department should be chosen to complement the major and minor fields. Elective courses taken outside of the department require prior approval of the Director of Graduate Studies.

Preparation for writing the dissertation begins during the third year, when the student starts writing the dissertation prospectus. The prospectus lays out the intellectual motivation for the dissertation and the research plan designed to complete it. The prospectus is to be approved by the faculty adviser, who then becomes the chairperson of the dissertation committee. The dissertation committee consists of three professors, who can be either from the Economics Department, or other departments at Clark or other universities, with the approval of the faculty adviser. The faculty adviser approves the distribution of the dissertation prospectus to the dissertation committee. Upon approval of the committee, the dissertation prospectus is subsequently defended in an open presentation to the dissertation committee and other interested members of the community. The dissertation must be an original contribution to knowledge that is based upon independent research, convincingly presented and acceptably written.

Upon completion of the dissertation in a form acceptable to the committee, the candidate makes a copy of the dissertation available to the department, the faculty and the graduate students for two weeks prior to the dissertation defense. The defense is presented in an open presentation to the dissertation committee and other interested members of the community. Final approval of the dissertation is granted by the committee after consideration of any suggested changes or questions arising from the seminar. The dissertation must be completed within five years of passage of the preliminary examinations. If it is not, the student must successfully retake the preliminary examinations in economic theory before defending the dissertation. Under certain circumstances, published articles may be accepted by the department instead of a dissertation.

Students enrolled in the Ph.D. program may be awarded the M.A. upon satisfactory completion of twelve credits and the qualifying exams. In the case of students who do not continue toward the Ph.D., on recommendation of the Director of Graduate Studies, the M.A. may be awarded upon satisfactory completion with a passing grade of twelve courses (including all required first year courses) with a minimum grade point average of 3.0. A student should discuss program plans with the graduate student adviser before registration day and secure approval of the course program.

Scholarship assistance for students admitted to the Ph.D. program is available. Full or partial tuition remission may be granted to particularly well-prepared students. In addition, several teaching assistantships are awarded, enabling graduate students to gain experience in undergraduate instruction. These cover remission of tuition and a cash stipend. Employment as a research assistant is also available for some well-qualified students. The number of research assistants is dependant on the availability of funding from external grants.

Courses

ECON010 Economics and the World Economy/Lecture, Discussion

This course introduces the vital contribution economics can make to an understanding of how society operates by comparing the methods used for resource allocation in different economic systems. The course develops basic economic concepts through comparisons across countries, over time, and for different goods, rather than by emphasizing economic theory. These economic concepts are then applied to a variety of important current policy issues. Fulfills the Global Comparative Perspective. Staff/Offered every semester

ECON011 Principles of Economics/Lecture, Discussion

Introduction to economic analysis. Develops a set of economic concepts used in the 200-level courses offered in the department. Elements of price and income theory are emphasized. Policy questions are treated both to reinforce concepts and illustrate applicability of the analysis. Open to first-year students. Prerequisite: ECON010 or 100. Staff/Offered every semester

ECON100 Birth, Death and Economics: The Economics of World Population

The Economics Department regularly offers a first-year seminar. For the Fall 2007 semester the subject of the seminar is the Economics of World Population. The course serves both as an introduction to economics and demography. It investigates how economic factors affect the size and distribution of world population, as well as how demographic factors influence economic well-being. ECON100 is a substitute for ECON010. Fulfills the Global Comparative Perspective. Mr. Weinrobe/First-Year Seminar

ECON108 International Economics: Trade and Finance/ Lecture, Discussion

Reviews the basic principles of international economics. Examines policy issues in international trade and foreign investment, and explores policy alternatives. Not a prerequisite for ECON207 or 208, but may be taken in preparation for them. Prerequisite: ECON010 or 100. Staff/Offered every year

ECON113 Monetary Economics: Theory and Policy/ Lecture, Discussion

Monetary economics investigates the structure of the financial system, the institutions and customs of that system and the role of money in the economy. The macroeconomics of money and the role of the Federal Reserve (and other central banks) are studied. Prerequisite: ECON010 or 100. Mr. Weinrobe/Offered every year

ECON126 Public Policy toward Business/Lecture, Discussion

Examines the various types of industrial organization, the degrees of monopoly in competition and the development of public policies that affect business. Among issues traced are the development of antimonopoly regulation, consumer protection and public utilities. Business performance and government regulations are related to criteria from economic theory. Prerequisite: ECON010 or 100. Staff/Offered periodically

ECON128 Intro to Economic Development/Lecture, Discussion

This course is an introduction to development economics. Students examine the major theories of economic development, the major problems confronting less developed countries, and the policies and strategies appropriate for economic development. Some of the topics discussed include: poverty and inequality, education and health, the relationship between population and development, international trade, and sustainable development. Offered in alternate years with ECON228. Students may not take both ECON128 and ECON228. Prerequisite: ECON010 or ECON100. Ms. Ickowitz/Offered every other year

ECON157 The Economics of Natural Resources and the Environment/Lecture

A review of political economic problems associated with such natural resources as land, water and energy goods, as well as a resource common to all of us, our natural environment. Topics include the assessment of environmental impacts within market-oriented economics and the use of economics in policy designed to address environmental issues such as air pollution, global warming, biodiversity and suburban sprawl. Students may not take both ECON157 and ECON257. Prerequisite: ECON010 or 100. Ms. Geoghegan/Offered periodically

ECON160 Introduction to Statistical Analysis/Lecture, Discussion
Examines basic concepts and techniques of statistical method in economic analysis: descriptive statistics, probability theory, sampling distributions, hypothesis testing and simple and multiple regression. Prerequisite: ECON010 or ECON100. Staff/Offered every semester

ECON205 Microeconomic Theory/Lecture, Discussion
Describes and analyzes how a market-oriented economy functions in answering the five basic economic questions: (a) What commodities to produce? (b) How much of each to produce? (c) What productive techniques to use and how to provide incentives? (d) How to distribute the output among the various members of society? (e) What provision to make for the future? Interspersed with theory, the course contains frequent examples that demonstrate the use of microeconomics in solving problems faced by decision makers in both the private and public sectors. Prerequisite: ECON011. Ms. Geoghegan, Mr. Zhang, Mr. Bae/Offered every year

ECON206 Macroeconomic Theory/Lecture, Discussion
Macroeconomics is one of the core elements of economics. The subject includes the study of the determinants and behavior of the aggregate economy, including income, employment and the price level. The economy is examined at a point in time (statics) as well as over time (dynamics). Prerequisite: ECON011. Mr. Weinrobe, Mr. Callan, Ms. Bokil/Offered every year

ECON207 International Trade Theory/Lecture, Discussion
Studies international trade theory and policy at the intermediate level. Examines the fundamentals of international trade theory: comparative advantage, gains from trade, neoclassical trade theory, trade and income distribution. Traditional and modern instruments of protectionism, arguments for and against free trade and the role of international institutions are discussed. Prerequisite: ECON011; ECON205 is recommended. Ms. Bokil/Offered every year

ECON208 International Monetary Theory/Lecture, Discussion
International macroeconomics at the intermediate level. The fundamentals of international finance are studied: operations of international currency markets, the concept of the balance of payments and fixed versus flexible exchange-rate regimes. Analyzes macroeconomic policies under different exchange-rate regimes; theories of exchange-rate determination and the working of different international monetary regimes. Prerequisite: ECON011; 206 is recommended. Mr. Callan, Ms. Bokil/Offered periodically

ECON222 Labor/Lecture, Discussion
Applies the concepts of labor supply and labor demand in a basic model of labor markets. The model is used to analyze the results of the labor market: wages, employment and unemployment. The analysis is modified to allow for market imperfections and nonmarket forces, including trade unions and the government. Further topics include wage discrimination and income inequality. Prerequisite: ECON011. Mr. Gray/Offered every other year

ECON224 Applied Game Theory
Game theory is the formal study of situations in which individuals make decisions that will influence one another's welfare. It provides a set of analytical tools that are useful for scholars in all branches of social sciences as well as for practical decision-makers. This course offers an introduction to game theory with an emphasis on its applications. It covers applications in economics, business, political science, sociology, international relations, psychology, biology and recreation. No prior knowledge of game theory is presumed and the required mathematical background is minimal (high school algebra and one course in calculus will be sufficient). Prerequisite: MATH120 or MATH124 or instructor's permission. Mr. Zhang/Offered periodically

ECON226 Industrial Organization/Lecture, Discussion
Takes the concepts learned in Intermediate Microeconomic Theory to the next level. More complicated theories of firm behavior are examined. By allowing issues such as product differentiation and imperfect knowledge to enter the analysis, students gain access to more realistic views of industrial structure and performance. Practical applications of these theories can then be examined through the use of specific industry studies. Prerequisite: ECON011. Mr. Bae/Offered periodically

ECON228 Economic Development/Lecture, Discussion
Examines the major theories of economic development, the major problems confronting less developed countries, and the policies and strategies appropriate for economic development. Topics include agricultural development, income distribution, industrialization strategies, foreign aid and investment, population, labor and employment. This course is more rigorous than ECON128 and presumes a stronger background in economics. Students may not take both ECON128 and ECON228. Offered in alternate years with ECON128. Prerequisite: ECON011. Ms. Ickowitz/Offered every other year

ECON243 American Economic History/Lecture, Discussion
Offers a comprehensive survey of the development of the U.S. economy from a colonial backwater to a leading industrial power. It emphasizes the use of economic reasoning to understand historical controversies such as the struggle over slavery, the causes of the Great Depression, discrimination in labor markets, and the rise of the American export economy. Fulfills the Historical Perspective. Prerequisite: ECON011. Mr. Brown/Offered periodically

ECON244 European Economy: East and West/Lecture, Discussion
Offers a critical examination of European approaches to economic policy. In the West, these include the modern welfare state (widely available health care and housing), a more heavily regulated labor market, and moves toward a common market and currency. In the East, governments relied upon central planning and state ownership, even scoring some initial successes. Blending the tools of economic analysis with a close look at policies, this course will offer answers to these questions and an introduction to the economic challenges facing Western and Eastern Europe in the aftermath of the revolutions of 1989. Prerequisite: ECON011. Mr. Brown/Offered every other year

ECON245 The History of Global Economy/Lecture, Discussion
Provides students with a comprehensive introduction to the history of the global economy. Using straightforward tools of economic analysis, we study the debate over the origins of the global economy, the growth of it before World War I, its destruction during the Great Depression, and its re-emergence during the past 50 years. The course focuses on the potential impacts of globalization on economic growth, the distribution of benefits (and costs) and the role played by colonialism and imperialism. Fulfills the Historical Perspective. Prequisites: ECON011; ECON108 or ECON208 recommended. Mr. Brown/Offered every other year

ECON246 Latin America and the World Economy

This course explores the past 150 years of Latin American economic development. An important theme is understanding the roles of both domestic and international influences on Latin American development. The course begins with a consideration of colonial legacies. It then turns to the incorporation of many Latin American economies into the international economy by 1900 and the dramatic turn towards isolation with the adoption of import substitution policies during the 1940s and 1950s. It concludes with an assessment of the adoption of domestic and international reform during the 1980s and 1990s. Along the way, comparisons with Asia and North America will help to assess the pattern of Latin American development. Prerequisite: ECON011. Mr. Brown

ECON247 Economics of Population/Lecture, Discussion

The economics of population, economic demography, is the analysis of the economic forces that influence population and the demographic factors that affect traditional economic variables. The subject has strong ties to the economics of development, labor, health and macroeconomics, as well as to other disciplines of the social sciences. Prerequisite: ECON011. Mr. Weinrobe/Offered every other year

ECON250 Economics of Sport/Lecture, Discussion

Applies economic analysis to the sports industry. While the primary focus is on professional team sports, individual and amateur sports are covered as well. Labor relations, antitrust law, public subsidization of sports facilities, discrimination and sports broadcasting are among the topics that are covered from an economics perspective. Prerequisite: ECON011. Staff/Offered periodically

ECON257 Environmental and Natural Resource Economics

Examines some of the issues associated with the economics of natural resources and the environment. Topics discussed, at both the theoretical and empirical level, are chosen from the following: the theory and analysis of renewable and nonrenewable resources, resource scarcity and the economy, sustainable development and the measurement of the benefits and costs of environmental regulation. Proper policies are discussed to encourage resource conservation, the problems of common property resources and the use of economic incentives to internalize environmental externalities. Students may not take both ECON157 and ECON257. Prerequisite: ECON011 (LAS256) Ms. Geoghegan/Offered periodically

ECON260 Probability and Statistics/Lecture

See Mathematics 217.

ECON265 Econometrics

This course deals with the application of statistical methods to economics. The objective is to expose students to economic model building, testing the model statistically, and applying the model to practical problems in forecasting and analysis. By understanding the theoretical and econometric basis of equations, students gain proficiency in formulating, estimating and interpreting testable relationships on their own. Prerequisite: ECON011 and 160. Staff/Offered periodically

ECON271 Introduction to Mathematical Economics/Lecture, Discussion

An introductory survey of the use of mathematical methods in economic analysis. Topics include elements of linear algebra, optimization and differentiated equations. Prerequisite: ECON011 and permission of instructor. Staff/Offered every year

ECON273 Forecasting/Lecture, Discussion

Investigates a number of forecasting techniques commonly used in economic analysis. Among the techniques covered are time series analysis, econometric models, simulation models and expectations surveys. Prerequisites: ECON011 and 160 or equivalent. Mr. Callan/Offered periodically

ECON277 Urban Economics/Lecture, Discussion

Urban economies provide most of the employment in the developed world and the most dynamic sector of developing economies. Cities are also home to a growing share of the world's residents. This course offers an overview of two key dimensions of the economies of urban areas: the process of agglomeration and the forces shaping where people live and work. The course applies theoretical insights from urban economics to questions facing urban areas, including the question of overurbanization, urban sprawl, spatial segregation by race and income, and housing. Our discussion draws upon examples from Beijing to Berlin to Worcester. Prerequisite: ECON011. Mr. Brown/Offerered every year

ECON297 Honors

Students work on an individual basis with a faculty member on an intensive piece of research, culminating in an honors thesis. A student desiring departmental honors must register for one semester of ECON297 in the fall of the senior year. Required for departmental honors. Prerequisite: permission of instructor. Staff/Offered every year

ECON298 Internship

Students spend a semester working full or part time outside the University as part of their academic experience. To qualify, the internship experience must significantly involve an extension, embodiment or illustration of previous or concurrent, systematic academic work in economics. Offered for variable credit. This course does not count toward the economics major. Staff/Offered every year

ECON299 Independent Study

Offered for variable credit. Staff/Offered every year

ECON301 Microeconomics-Foundations/Seminar

Mr. Zhang/Offered every year

ECON302 Microeconomics-Topics/Seminar

Mr. Bae/Offered every year

ECON303 Macroeconomics I/Seminar

Ms. Bokil/Offered every year

ECON304 Macroeconomics II/Seminar

Mr. Callan/Offered every year

ECON307 International Economics/Seminar

Ms. Bokil

ECON308 Open Economy Macroeconomics

Mr. Callan

ECON322 Labor Economics/Seminar

Mr. Gray/Offered every other year

ECON326 Industrial Organization/Seminar

Mr. Bae

ECON328 Economic Development/Seminar

Ms. Ickowitz/Offered every other year

ECON329 Microeconomics of Development

Ms. Ickowitz/Offered every other year

ECON357 Environmental Economics/Seminar
Ms. Geoghegan

ECON359 Spatial Environmental Analysis
Ms. Geoghegan, Mr. Gray

ECON360 Probability and Statistics/Lecture
See Mathematics 217.

ECON365 Basic Econometrics
Mr. Callan, Ms. Geoghegan/Offered every year

ECON366 Applied Econometrics/Seminar
Mr. Gray/Full-year course. Offered every other year

ECON371 Introduction to Mathematical Economics/ Lecture, Discussion
See Economics 271.

ECON373 Forecasting
Mr. Callan

ECON377 Urban Economics/Seminar
Mr. Zhang/Offered every other year

EDUCATION

Program Faculty

Thomas Del Prete, Ed.D. - *Chair*
S. Leslie Blatt, Ph.D.
Sharon A. Griffin, Ph.D.
Sarah Michaels, Ph.D.

Clinical Faculty

John Ameer, Ed.D.
Eric DeMeulenaere, Ph.D.
Letina Jeranyama, Ph.D.
Holly Kapuscienski, M.Ed.
James McDermott, Ed.D.
Maureen Reddy, Ed.D.
Heather L. Roberts, Ph.D.
Nathaniel C. Seale, M.Ed.
Marlene Shepard, M.A.

Program Overview

The Jacob Hiatt Center for Urban Education and Education Department strive to provide students with outstanding programs in teacher preparation. The Master of Arts in Teaching program, one of the fifth-year accelerated degree programs at Clark, qualifies students for the initial teaching license according to Massachusetts state requirements at either the elementary, middle or secondary level. The initial license is the second level of licensure in Massachusetts and qualifies students to teach in Massachusetts and most other states.

Clark programs are a collaborative endeavor, combining the efforts of faculty from the Education Department, Jacob Hiatt Center for Urban Education and arts and sciences and teachers from nearby partner schools in Worcester. Partner schools include University Park Campus School, a grades 7-12 school that has become a model of urban-school effectiveness, and two secondary schools reconstructed for the same purpose. Clark programs uniquely combine cutting-edge school reform and professional learning with teacher education.

Core Values and Commitments

The program is committed to developing teachers who:

- believe that all students can learn;
- foster authentic learning, i.e., by engaging all students in meaningful thinking, reading, writing and speaking activities;
- support all students in learning, with an emphasis on academic literacy, personalization and equitable "best practice" teaching;
- build learning communities with their children based on values such as respect, mutual support and collaboration, and likewise collaborate with colleagues for the benefit of children; and
- continually reflect on and assess their own teaching.

In achieving this goal, the Master of Arts in Teaching program:

- immerses students in cohort groups in a partner school for the full academic year;
- integrates school and University perspectives in required courses, with both teachers from partner schools and University faculty in instructor roles;
- connects school experience and study in all phases of the program;
- provides students with collaborative learning experiences such as "rounds," a signature practice that brings together students, teachers and University faculty for structured classroom observation and reflection;
- provides students with teaching responsibility for the majority of the academic year.

Undergraduate Requirements

Qualifying for Massachusetts Initial Teacher Licensure at Clark

In order to qualify for the initial teaching license in Massachusetts, a student must demonstrate knowledge of the subjects corresponding to the teaching field of his or her interest. Students usually demonstrate this knowledge by completing an appropriate arts and sciences major and/or taking courses that fulfill state standards, and earning a bachelor's degree. All students, in addition, must take education courses that meet the state professional standards for teachers and must pass the Massachusetts Tests for Educator Licensure. The initial teaching license in Massachusetts is honored in most other states, as part of a reciprocity agreement.

The Hiatt Center for Urban Education and Education Department offer an intensive program qualifying students for the Massachusetts initial license at the elementary, middle and secondary levels and leading to the Master of Arts in Teaching (MAT). Undergraduates take EDUC152 Complexities of Urban Schooling as a prerequisite for the MAT. Students interested in an education minor can combine this course with others, although it is not required for the MAT program (interested students should check with Marlene Shepard, Hiatt Center program coordinator). Qualified undergraduates can begin the MAT program in their senior year as accelerated degree students (see Clark Accelerated B.A./M.A. program requirements).

The MAT program integrates course work with field experiences in nearby partner schools (called professional-development schools) under the guidance of education faculty and expert practitioners. All students take a three-course sequence in Teaching and Learning and EDUC361 Human Development and Learning. Additional required courses are listed below by teaching level:

Elementary (Grades 1-6) Initial Licensure Program:

EDUC360 Literacy Development
EDUC382 Ways of Knowing in the Arts
EDUC383 Ways of Knowing in History
EDUC384 Ways of Knowing in the Humanities
EDUC386 Ways of Knowing in the Physical and Natural Sciences
EDUC387 Ways of Knowing in Mathematics
EDUC388A Practicum: Elementary Teaching and Learning.

Undergraduate students seeking to qualify for the elementary-teaching license should take a range of courses in the arts and sciences that correspond to state subject-matter knowledge requirements. This requirement may affect a student's choice of liberal-arts major. Students should contact the Hiatt Center program coordinator as early as possible to discuss this and other program requirements.

Middle School (Grades 5-8) Initial Licensure Program

(Offered in the following areas: biology, English, general science, history, mathematics and physics):

EDUC308 Literacy Across the Curriculum
EDUC370A Becoming an Effective Middle-School Educator
EDUC348 Understanding Best Practice

One "Ways of Knowing" course corresponding to teaching field (see courses in the Elementary program listing above)

EDUC378A Practicum: Middle-School Teaching and Learning

Undergraduate students seeking to qualify for the middle school-teaching license normally complete a major in the subject-matter area in which they aim to teach.

Secondary (Grades 8-12) Initial Licensure Program

(Offered in the following areas: biology, chemistry, English, French, history, mathematics, physics, Spanish and visual arts):

EDUC308 Literacy Across the Curriculum
EDUC348 Understanding Best Practice

One "Ways of Knowing" course corresponding to teaching field (See courses in the Elementary program listing above.)

EDUC379A Practicum: Secondary-School Education.

Undergraduate students seeking to qualify for the secondary school-teaching license normally complete a major in the subject-matter area in which they aim to teach.

Accelerated Degree Program

Education offers an accelerated B.A./Master's degree program to eligible students. For more information, visit www.clarku.edu/accelerate.

Graduate Programs

The master's program in urban education and teacher research is designed for full-time or part-time who have already qualified for teacher licensure. This one-year, 10-course program provides well-rounded experiences: core courses in the areas of culture, language, teaching and teaching research; extensive teaching responsibility in professional-development schools under the guidance of education faculty and expert practitioners; intensive summer institute courses with arts and sciences, education and K-12 teaching faculty; course work in a student's teaching field; a teacher research project and teaching portfolio. Teachers interested in the M.A. who wish to enroll as part-time students should consult with the Education Department.

The Master of Arts in Teaching (M.A.T.) program is designed for full-time students (including undergraduates who qualify for the accelerated B.A./M.A. program) seeking the initial teaching license at either the elementary, middle or secondary levels. It begins in spring/summer and extends through the following academic year. Students enter as part of a cohort team that is guided through the program by university and school mentors. They are placed with a teacher mentor in one of the Hiatt Center professional-development schools at the beginning of the academic year and take the equivalent of 10 courses, including the teaching practicum, depending on their prior course work and planned teaching level. Course required for the M.A.T. are the same as those listed above under initial licensure.

Special Programs

Human Services Program

This four-course sequence is designed for students interested in pursuing a career and/or graduate study in education and the helping professions. Students will have course work and field experiences dealing with diverse groups including children, families and the aged in settings which include schools, the court system, mental-health agencies and institutions. Students will acquire skills through a balance of study and applied field work. Work in the Worcester area will serve to integrate material from the sequence. Students receive an official transcript notation documenting the completion of this program.

- EDUC155 Education and Social Policy
- EDUC194 Field Experience I
- EDUC195 Field Experience II
- EDUC269 The Skilled Helper

School Psychology Program

This four-unit sequence provides intensive first-level training for students in the junior and senior years considering advanced graduate work in school psychology and related professional fields. Students are required to complete a two-semester placement for 10 hours a week under the supervision of a school counselor, social worker or psychologist. Students receive an official transcript notation documenting the completion of this program.

- EDUC266 Analysis of Individual Ability and Style
- EDUC268, Sec. 1 Psychoeducational Methods Semester I
- EDUC268, Sec. 2 Psychoeducational Methods Semester II

Courses

EDUC021 LITERACY, LEARNING, WRITING/LECTURE, DISCUSSION

See English 021.

EDUC040 SCIENCE AND SOCIETY/FIRST-YEAR SEMINAR

See Physics 040.

EDUC112 TRANSFORMATIVE SCHOOLING: DOCUMENTARY VIDEO FOR SOCIAL CHANGE/FIRST-YEAR SEMINAR

This is a field-based and inquiry-oriented seminar, an apprenticeship in documentary filmmaking, as well as school and community research and advocacy for social change. The course involves instruction in the basics of video production (using state-of-the-art digital cameras), and seminar members partner with new and experienced teachers in inner-city public schools. We work with them as video assistants and also develop our own films about the challenges and possibilities of urban-school reform. In addition to hands-on activity, there is serious attention to reading in the field of ethnographic research, education reform and community institutions that support youth development. Moreover, seminar members get involved in grassroots organizing and soliciting input from the community, as well as ongoing critique of their planning documents, filmed footage and written companion texts. We thus integrate field work with theory and reflective critique. A final project for this seminar will be completed in the spring semester. Fulfills the Values Perspective and is recommended for all communication and culture majors. Ms. Michaels/Offered every year

EDUC152 COMPLEXITIES OF URBAN SCHOOLING/LECTURE, DISCUSSION

Addresses the social and academic questions that surround urban education using linguistic, sociological and psychological perspectives. Through lecture, discussion and field work, students will explore challenges faced by educators. For undergraduate students in the initial teacher-licensure programs. Mr. Ameer/Offered every year

EDUC155 EDUCATION AND SOCIAL POLICY/LECTURE, DISCUSSION

Examines social problems, social policy and education. Conceptual tools for the analysis of social policies are used. Examinations of existing programs and social agencies enable students to understand agency functions, client population and the relationship between the individual agency and the larger social-service network. Emphasis is placed on social problems and social solutions, linking individuals and external primary groups with societal resource systems and the impact of social-policy change on individuals and institutions. Mr. Seale/Offered every year

EDUC194 FIELD EXPERIENCE: SPECIAL EDUCATION AND HUMAN SERVICES/ DISCUSSION, FIELD PLACEMENT

Provide direct, supervised experience within educational and human-services agencies. Placements are based upon students' experience, goals and academic backgrounds. Placement possibilities include schools, mental-health centers, institutions, the courts, substance-abuse centers, crisis agencies and group homes. A weekly seminar provides the opportunity for students to analyze their field-work experience. Special note: These courses may be taken as a full-year, two-course sequence (EDUC194 and 195) or as a single course either semester (EDUC194). Mr. Seale/Offered every year

EDUC208 LITERACY ACROSS THE CURRICULUM/LECTURE, DISCUSSION, SEMINAR, FIELD PLACEMENT

Designed for students teaching at both the middle and secondary levels. Focuses on literary issues affecting learning across all curriculum areas, as well as the particular reading-writing and discourse issues that affect learning in different disciplines. Field work will enable students to try various instructional strategies and assessment practices. Staff/Offered periodically

EDUC260 LITERACY DEVELOPMENT/LECTURE, DISCUSSION, SEMINAR, FIELD PLACEMENT

An overview of the development of reading, writing and literacy-related oral-language abilities from the preschool years through high school. Links between oral and written skills and between reading and writing are examined. Special attention will be given to the teaching of reading and writing in ways that support greater student engagement. Field work in schools will enable students to try out various instructional approaches. Ms. Reddy/Offered every year

EDUC261 HUMAN DEVELOPMENT AND LEARNING/LECTURE, DISCUSSION

Introduces students to central and evolving understandings of human development and their implications for learning and pre-K through 12 schooling. Particular emphasis will be given to cognitive and sociocultural theories of learning and development. Ms. Griffin/Offered every year

EDUC264 KNOWLEDGE, DEVELOPMENT AND INSTRUCTION/LECTURE, DISCUSSION, CLASS EXPERIENCES

Examines the central knowledge structures that children acquire during the preschool and elementary years and how they influence school learning; how these structures develop for typical and atypical children; and opportunities for students to develop skills in developmental assessment and instructional programming. Students use their understanding of children's development to design classroom and remedial learning activities. Ms. Griffin/Offered periodically

EDUC265 EMOTIONAL DEVELOPMENT/SEMINAR

Examines what emotions are and how they develop from birth to adulthood. Emphasis is placed on emotional development during childhood; on the ways emotions are shaped by cognitive, social and biological factors; and on the ways emotions shape learning and behavior. Ms. Griffin/Offered periodically

EDUC266 ANALYSIS OF INDIVIDUAL ABILITY AND STYLE/LECTURE, DISCUSSION, PRACTICUM

Uses techniques to understand the individual as a whole. The theory of individual assessment, some tools for assessment, and the analysis of assessment data will be covered. Focus is placed on understanding, administering and interpreting both traditional and alternative assessment tools, including measures of cognitive ability, scholastic achievement and personality. Students are required to administer assessment procedures and analyze case histories. Staff/Offered every year

EDUC268 SEC. 1 AND 2 PSYCHOEDUCATIONAL PRACTICUM AND SEMINAR/SEMINAR, FIELD PLACEMENT

Provides a two-semester placement, eight to 10 hours a week, within the pupil-personnel department of a public-school system. A school psychologist and/or counselor will function as an ongoing supervisor. Activities include experience in conducting and interpreting psychoeducational assessments, obtaining social and developmental-history information through home visits, and observing and participating in the development of individualized educational plans as part of the team evaluation process. Mr. Seale/Offered every year

EDUC269 THE SKILLED HELPER/LECTURE, DISCUSSION, PRACTICUM

Designed for the development of the helping professional. Emphasis is placed on dynamics of the helping relationship and basic interviewing skills. Class exercises are used to facilitate skill development. Students who are not concurrently taking a field course are placed in a human-service agency one-half day per week. Mr. Seale/Offered every year

EDUC270A BECOMING AN EFFECTIVE MIDDLE-SCHOOL EDUCATOR/ LECTURE, DISCUSSION, FIELD-EXPERIENCES, SEMINARS

Takes place in a professional-development school under the direction of Clark education faculty and teacher collaborators. Grounded in an understanding of the developmental characteristics and needs of middle-school-age students, it enables students to understand and develop competency in various practices — such as cooperative learning (including "complex instruction") and reciprocal teaching — that engage students of diverse backgrounds in active learning. Mr. Del Prete/Offered periodically

EDUC270B BECOMING AN EFFECTIVE SECONDARY EDUCATOR/ LECTURE, DISCUSSION, FIELD PLACEMENT

Investigates the teaching process as a dynamic, complex human endeavor requiring the mastery of a variety of skills and the acquisition of a specific knowledge base. Mr. McDermott/Offered every year

EDUC272 Focusing on a Discipline in the Secondary School/ Lecture, Discussion, Field Experience

Investigates the teaching process by direct observation of and interaction with practioners in one of the Hiatt Center's partner secondary schools. Students will observe and work with teachers in their subject area and will volunteer to aid them in class, correct papers and tutor, and prepare worksheets. Students will also teach one class.
Staff/Offered every year

EDUC278A Practicum: Middle-School Teaching/Learning

Involves at least 300 hours of teaching/learning experience at a professional-development school. Students will be supervised by education faculty and/or professional-development school teachers.
Mr. Del Prete/Offered every year

EDUC278B Seminar: Middle-School Teaching/Learning

The aim of this field-based seminar is to foster reflective practice and to deepen understanding of how to engage, support, sustain and assess the learning of diverse students. Students will conduct rounds and develop and present a portfolio of their work, which meets Massachusetts curriculum and teaching guidelines. Mr. Del Prete/ Offered every year

EDUC279A Practicum: Secondary Education

The culminating experience for the secondary initial-licensure candidate. Students complete at least 300 hours of field work with corresponding seminars and conferences. Staff/Offered every year

EDUC282 Ways of Knowing in the Arts/Lecture, Discussion, Field Placement

Staff/Offered periodically

EDUC283 Ways of Knowing in History and the Social Sciences/Lecture, Discussion, Field Placement

Staff/Offered every year

EDUC284 Ways of Knowing in the Humanities/Lecture, Discussion, Field Placement

Staff/Offered every year

EDUC286-A Ways of Knowing in the Physical and Natural Sciences/Lecture, Discussion, Field Placement - Elementary

Basing our approach on the way scientists themselves learn about nature, this course explores science learning through experiment and theory. Our students are often simultaneously cast as both learner and teacher, in which roles they investigate a variety of science curricula and experience different classroom learning environments. Through discussions, readings and hands-on science lessons, they confront science content, science pedagogy, and the real-world contraints of state curriculum frameworks, professional standards and high-stakes testing. Observations in Worcester Public School classrooms provide a rich resource for testing the ideas against the everyday realities.
Staff/Offered every year

EDUC286-B Ways of Knowing in the Physical and Natural Sciences/Lecture, Discussions, Field Placement - Middle/Secondary

Basing our approach on the way scientists themselves learn about nature, this course explores science learning through experiment and theory. Our students are often simultaneously cast as both learner and teacher, in which roles they investigate a variety of science curricula and experience different classroom learning environments. Through discussions, readings and hands-on science lessons, they confront science content, science pedagogy, and the real-world constraints of state curriculum frameworks, professional standards and high-stakes testing. Observations in Worcester Public School classrooms provide a rich resource for testing the ideas against the everyday realities.
Staff/Offered every year

EDUC299 Sec. 1 Directed Readings — Undergraduate

Independent study for qualified students on a selected topic. Permission of instructor required. Offered for variable credit.
Staff/Offered every year

EDUC299 Sec. 2 Directed Research — Undergraduate

Staff/Offered every year

EDUC299 Sec. 4 Field Project — Undergraduate

Provides individualized and extended experiences in a wide variety of educational and human-service agencies and institutions. Supervision is provided by the University and field-agency personnel. Combines related seminars, conferences and readings as a basis for critical analysis of the experiences within the context of applied theory and practice. Offered for variable credit. Staff/Offered every year

EDUC304 Teaching as Research Seminar I, II

Brings together urban-school teachers (at the elementary, middle and secondary level) with graduate students and faculty involved in university-based educational research. Focuses on qualitative, sociolinguistic research in classrooms, emphasizing the study of talk and texts as a vehicle for better understanding students' learning, developing systematic techniques for describing and critiquing classroom activities, and supporting effective learning among a socioculturally diverse population of students. Participants meet in small, facilitated groups to carry out qualitative research in urban classrooms and develop forums through which their work can be disseminated to a wider community of teachers and researchers. Staff/Offered periodically

EDUC305 Teaching as Research Seminar I, II

See Education 304.

EDUC308 Literacy Across the Curriculum/Lecture, Discussion, Seminar, Field Placement

See Education 208.

EDUC311 Teaching and Learning/Seminar, Discussion

Challenges the theory that there is one best way of understanding that students must learn according to that one way, and that their capacity to learn ought to be judged accordingly. Explores many adequate pathways for developing knowledge and emphasizes that teachers who acknowledge and support different pathways help make learning more accessible for students. This premise and its implications for teaching, curriculum, assessment, the formation of learning communities for diverse groups of students, and the role of the teacher in enabling students to actively construct knowledge are explored. Mr. Del Prete/ Offered every year

EDUC314 Selected Topics in Children's Literature/ Seminar, Discussion

This course will immerse students in reading and writing about chapter books written for children and young adults. We will read as a class one to two books per week depending on length. Additional reading will be required for a class presentation and also for the final project. The bulk of the reading will be drawn from the Newbury Medal and honor-award winners. This course will focus on reading, discussing and writing about children's/young adults' literature as literature rather than issues of teach-ability or age appropriateness. Staff/Offered periodically

EDUC325 RECENT THEORETICAL ADVANCES IN INTELLECTUAL DEVELOPMENT AND THEIR IMPLICATIONS FOR EDUCATION: A CASE STUDY/LECTURE, SEMINAR
Studies contemporary theories in the field of intellectual development, their application to the domain of mathematical reasoning, and the general intellectual tradition (empiricist, rationalist, sociohistoric) and interpretive frameworks within which this work has been conducted. The relevance of this work for understanding education in the United States today and in suggesting directions for its improvement will also be discussed. Ms. Griffin/Offered periodically

EDUC326A -1 WAYS OF KNOWING SEMINAR
This yearlong seminar is designed to support M.A.T. students in developing an understanding of what it means to teach according to the ways of thinking, inquiring, writing and performing represented by each academic discipline in the context of diverse, urban learning communities. Ms. Kapuscienski/Offered every year

EDUC326A-2 WAYS OF KNOWING SEMINAR - MIDDLE/SECONDARY
This yearlong seminar is designed to support M.A.T. students in developing an understanding of what it means to teach according to the ways of thinking, inquiring, writing and performing represented by each academic discipline in the context of diverse, urban learning communities. Mr. Del Prete/Offered every year

EDUC326B WAYS OF KNOWING SEMINAR
This seminar engages M.A. students in deepening and demonstrating their understanding of what it means to teach the academic disciplines in the context of diverse, urban learning communities.

EDUC327 CULTURE, LANGUAGE AND EDUCATION
Graduate-level course dealing with theories and practices relevant to teaching and learning within a sociocultural perspective. Questions about language and cognition, multicultural and social diversity in the classroom, curricular and pedagogical theories and practices, language and literacy development, bilingual education, access and equity, learning across the life span, and the politics of education are discussed. In all areas, analysis of language and communication is used as a key tool for critical understanding. Staff/Offered every year

EDUC348 UNDERSTANDING BEST PRACTICE

EDUC359 TEACHING AND LEARNING II

EDUC362 TEACHING AND LEARNING III

EDUC360 LITERACY DEVELOPMENT/LECTURE, DISCUSSION, SEMINAR, FIELD PLACEMENT
See Education 260.

EDUC361 HUMAN DEVELOPMENT AND LEARNING/LECTURE, DISCUSSION
See Education 261.

EDUC362 MATH AND/OR EMOTION RESEARCH/SEMINAR
Ms. Griffin/Offered periodically

EDUC363 COGNITION AND INSTRUCTION/SEMINAR
Students will investigate the conceptual networks children construct for mathematical concepts, the instructional principles that underlie effective instruction and the variety of methods that can be used to assess children's learning and development. Each student will conduct an independent research study on a topic of interest. Ms. Griffin/Offered periodically

EDUC367 SEC. 1 CLINICAL EXPERIENCE AND SEMINAR I (ELEMENTARY)

EDUC367 SEC. 2 CLINICAL EXPERIENCE AND SEMINAR I (MIDDLE SCHOOL)

EDUC367 SEC. 3 CLINICAL EXPERIENCE AND SEMINAR I (SECONDARY)
Integrates at least 200 hours of focused field work with group professional-development activities such as "rounds" and seminar discussion. Students will be mentored by education faculty and/or professional-development school teachers as they broaden and deepen their understanding of particular approaches to curriculum (consistent with local, state and national curriculum frameworks) and develop expertise in teaching practices (e.g., fostering and assessing literacy development) that engage groups of children, including children with special needs, in active and developmentally appropriate learning. This experience promotes students' capacity to build and participate in a professional learning community reflecting on teaching, children's learning, schooling and education. Mr. Del Prete/Offered every year

EDUC368 SEC. 1 CLINICAL EXPERIENCE AND SEMINAR II (ELEMENTARY)

EDUC368 SEC. 2 CLINICAL EXPERIENCE AND SEMINAR II (MIDDLE)

EDUC368 SEC. 3 CLINICAL EXPERIENCE AND SEMINAR II (SECONDARY)
Integrates at least 350 hours of field work with group professional-development activities such as "rounds," seminar discussion and teacher research. Students will be mentored by education faculty and/or professional-development-school teachers as they develop their teaching practice and understanding of children's learning. Particular emphasis will be placed on ways to develop and support children as active thinkers, on providing multiple paths of learning for children in keeping with diverse needs and ways of knowing, and on creating and sustaining a responsive and responsible learning community. Students will frame and conduct a teacher research project to build understanding of some aspect of the teaching-learning process. Mr. Del Prete/ Offered every year

EDUC372 FOCUSING ON A DISCIPLINE IN THE SECONDARY SCHOOL/ LECTURE, DISCUSSION, FIELD EXPERIENCE
See Education 272.

EDUC377 FACILITATING TEACHER RESEARCH: ETHNOGRAPHIC AND SOCIOLINGUISTIC METHODS
Provides theoretical, methodological and applied research training to classroom teachers and graduate student/researchers interested in facilitating teacher research. Readings will include text about teacher research, by teacher researchers, and about theoretical and empirical work on group discussion and the social formation of mind. In addition, participants will be involved in ongoing data collection and analysis of existing teacher research groups. Thus the forum will develop practical skills in group leadership, as well as research skills in documenting and analyzing teacher research. This is an advanced seminar for people who have already participated in teacher research and/or facilitating teacher-research groups. Permission of the instructor is required. Ms. Michaels/Offered periodically

EDUC378A PRACTICUM: MIDDLE-SCHOOL TEACHING/LEARNING
Involves at least 300 hours of teaching/learning experience at a professional-development school. Students will be supervised by education faculty and/or professional-development school teachers.
Mr. Del Prete/Offered every year

EDUC378B SEMINAR: MIDDLE-SCHOOL TEACHING/LEARNING
The aim of this field-based seminar is to foster reflective practice and to deepen understanding of how to engage, support, sustain and assess the learning of diverse students. Students will conduct rounds and develop and present a portfolio of their work, which meets Massachusetts curriculum and teaching guidelines. Mr. Del Prete/Offered every year

EDUC379A PRACTICUM: SECONDARY EDUCATION
Involves at least 300 hours of teaching/learning experience at a professional-development school. Students will be supervised by education faculty and/or professional-development school teachers. Mr. Del Prete/Offered every year

EDUC379B SEMINAR: SECONDARY-SCHOOL TEACHING AND LEARNING
The aim of this field-based seminar is to foster reflective practice and to deepen understanding of how to engage, support, sustain and assess the learning of diverse students. Students will conduct rounds and develop and present a portfolio of their work, which meets Massachusetts curriculum and teaching guidelines. Mr. Del Prete/Offered every year

EDUC383 WAYS OF KNOWING IN HISTORY AND THE SOCIAL SCIENCES/ LECTURE, DISCUSSION, FIELD PLACEMENT
See Education 283.

EDUC384 WAYS OF KNOWING IN THE HUMANITIES/LECTURE, DISCUSSION, FIELD PLACEMENT
See Education 284.

EDUC386-A WAYS OF KNOWING IN THE PHYSICAL AND NATURAL SCIENCES/ LECTURE, DISCUSSION, FIELD PLACEMENT - ELEMENTARY
See Education 286-A.

EDUC386-B WAYS OF KNOWING IN THE PHYSICAL AND NATURAL SCIENCES/ LECTURE, DISCUSSION, FIELD PLACEMENT - MIDDLE/SECONDARY
See Education 286-B.

EDUC399 SEC. 1 DIRECTED READINGS — GRADUATE
Independent critical analysis of literature related to individual research. Offered for variable credit. Staff/Offered every year

EDUC399 SEC. 2 DIRECTED RESEARCH — GRADUATE
Individual research with direction from an instructor. Offered for variable credit. Staff/Offered every year

ENG021 LITERACY, LEARNING, WRITING/LECTURE, DISCUSSION
See English 021.

PHYS020 DISCOVERING PHYSICS/LECTURE, LABORATORY
See Physics 020.

PHYS040 SCIENCE AND SOCIETY/FIRST-YEAR SEMINAR
See Physics 040.

ENGINEERING

Program Faculty

Charles Agosta, Ph.D. - *Chair*
Lee Rudolph, Ph.D.
Luis Smith, Ph.D.

Program Overview

The 3/2 engineering program at Clark University is a five-year program offered in conjunction with several affiliated schools. Currently these schools are Columbia University, Washington University and Worcester Polytechnic Institute. Students enrolled in this program complete three years in residence at Clark followed by two additional years at one of the engineering schools. Students completing the program receive a B.A. degree from Clark and a B.S. degree in engineering from the affiliated school.

At Clark, students major in a field that strongly overlaps the entrance requirements for the engineering school. Appropriate majors include chemistry, computer science, environmental science and policy, mathematics, physics, and a self-designed liberal-arts/engineering major. At the engineering school, students may major in any of the fields they offer. In addition to the traditional engineering fields taught at all schools, unique programs such as engineering and public policy, biomedical engineering, system science and engineering, and fire-protection engineering are also available. Please consult the program chair for further information.

While the program is open to all Clark students, the required curriculum must be started during the first year of study to permit the timely completion of all requirements. Those students whose high-school background (as determined by placement examinations) has not prepared them to enter calculus (MATH120) and composition (ENG020) during their first semester must attend summer school to complete the requirements on time. All students intending to pursue the program are required to notify the program chair of their intent at the beginning of their first year and to choose their courses each semester in consultation with committee members.

Students are encouraged to seek a major adviser who is familiar with the program and the advice of 3/2 Engineering Committee members. Sample curricula for appropriate majors can be obtained from the committee chair or on the Clark Web site. Students intending a self-designed liberal-arts/engineering major may wish to use the 3/2 Engineering Committee as their major advisory committee.

Students interested in 3/2 engineering must contact the committee chair, Charles Agosta (phone: 508-793-7736, e-mail: cagosta@clarku.edu) before they sign up for classes in their first year.

Enrollment at the Engineering School

Students submit a formal application for admission to the engineering school through the 3/2 Engineering Committee during their junior year. Students receiving a positive endorsement from the committee normally can expect admission for enrollment as juniors at the engineering school in the following September. Application for financial aid is made at the same time, and those students receiving financial aid can expect to be supported at levels that are generally consistent with the level of Clark's support during the first three years. However, only Washington University awards financial aid to foreign students, who must rely on other sources of funds while at Columbia or WPI.

Students intending to enroll at WPI should apply as sophomores and may enroll in some engineering courses during their second or third year while still at Clark. Washington University encourages prospective students to enroll in one of their intensive January courses between Clark's first and second semesters.

Undergraduate Requirements

In addition to the requirements of the Program of Liberal Studies and their major at Clark (indicated elsewhere in this catalog), students must meet the entrance requirements of the engineering school. These requirements, which are essentially the same for all schools, can be found on the Clark Web site. Detailed questions concerning individual schools can be discussed with committee members.

The additional Clark requirements for the liberal-arts major and Program of Liberal Studies must be met concurrently with the above requirements. Several majors require additional summer-school work at Clark or advanced-placement standing to complete all requirements within the three-year period in residence at Clark. Students who complete a full year of study at the engineering school and who have completed all of Clark's requirements are eligible for the B.A. at the end of the fourth year of study.

ENGLISH

Program Faculty

Virginia Mason Vaughan, Ph.D. - *Chair*
James Elliott, Ph.D.
SunHee Kim Gertz, Ph.D.
Betsy P. Huang, Ph.D.
Fern Johnson, Ph.D.
Lisa Kasmer, Ph.D.
Stephen M. Levin, Ph.D.
Winston Napier, Ph.D.
Meredith Neuman, Ph.D.

Adjunct Faculty

John Bassett, Ph.D.
Gino DiIorio, M.F.A.

Department Instructors

Louis Bastien, Ph.D.
James Dempsey, M.A.
Michael Eldridge, B.A., S.A.G.
Jennifer Gjulameti, A.B.D.
Lea Graham, Ph.D.
Jennifer Plante, M.A.
Aimee Sands , M.F.A.
Claire Schomp, M.A.
D. L. Stephenson, Ph.D.
William G. Tapply, M.A.T.
Lucilia Valerio, Ph.D.

Emeriti Faculty

John J. Conron, Ph.D.
Serena S. Hilsinger, Ph.D.
Stanley Sultan, Ph.D.

Writing Program

Jennifer Plante, M.A. – Interim Director

Graduate Studies in English

SunHee Kim Gertz, Ph.D., Director

Writers in Residence

Lea Graham, Ph.D.
William Tapply, M.A.T.

Program Overview

The program is primarily designed to meet the needs and interests of English majors and minors, although the variety of courses offered may appeal to other students as well. We assist students in developing skills in close reading, critical thinking and effective writing, and in acquiring knowledge and experience valuable to any vocation. Moreover, the program encourages the development of a sense of cultural history, sensitivity to literary values and first-hand knowledge of important authors, works and periods of literature in English.

We advise English majors to take two yearlong historical sequences early in their programs. Any student majoring only in English should also select—in consultation with his or her adviser—a suitable area of specialization drawing on courses, both inside and outside the English Department (see below).

Majors and minors should note that some courses fulfill more than one requirement. Requirements may also be fulfilled, through an arrangement with the Worcester Consortium of Higher Education, at Assumption College and the College of the Holy Cross. For those interested in studying abroad, majors and minors should contact the Office of Study Abroad Programs regarding our partner program at the University of East Anglia. In addition, the London Internship Program offers a variety of opportunities in fields such as theater and journalism.

For these and other aspects of the program, we strongly urge majors and minors to consult with their advisers.

The English Department is an active member of Clark's Higgins School of the Humanities and encourages students to participate in the school's events and opportunities.

Undergraduate Requirements

Nonrequired Preparatory Courses:

IDND018 Expository Writing/Workshop
ENG019 The Essay: Reading and Writing/Workshop
ENG020 Introduction to Literature and Composition/Discussion

Core Requirements:

A minimum grade of C is required to receive major field credit. Each designation in parentheses in the descriptions below is used in course listings every semester in order to identify what requirement a course meets. Thus, if a course does not appear in the list below (for example, a new course), you can nonetheless readily see what requirements it meets through these designations.

A. Historical Sequences (A; 4 courses)

The four courses used to satisfy this requirement must include either the entire sequence ENG140 and ENG141 or the entire sequence ENG180 and ENG181.

1. Either one of the two sequences (2 courses):
    ENG140 Major British Writers I
    ENG141 Major British Writers II

OR

    ENG180 Major American Writers I
    ENG181 Major American Writers II

2. Each major must take at least one of the following (no double-counting with courses in #1 above):
   ENG133 Survey of Women Writers I
   ENG140 Major British Writers I
   ENG180 Major American Writers I
   ENG182 African American Literature I
3. Each major must take any other additional single course offered as a historical sequence course, such as (no double-counting with courses in #1 or #2 above):
   ENG133 Survey of Women Writers I
   ENG134 Survey of Women Writers II
   ENG182 African American Literature I
   ENG183 African American Literature II

B. Genre Courses (2 courses)

1. Each major must take at least one poetry course (B-1), such as:
   ENG107 Creative Writing: Poetry
   ENG110 English Poetry I
   ENG111 English Poetry II
   ENG184 American Poetry
2. Each major must also take at least one other genre course (B-2), such as:
   ENG135 The Short Story
   ENG143 Terrible Beauty: The Art of Tragedy
   ENG144 Drama of the Western Tradition
   ENG145 Fabulae: The Genre of Romance
   ENG146 Oliver Twisted: The Literature of the Fantastic
   ENG206 Writing the Novel I

C. Period Requirements (3 or 4 courses)

1. Each major must take at least two courses of literature before 1700, one of which must be at the 200-level (C-1a for 100-level; C-1b for 200-level), such as:
   ENG120 Introduction to Shakespeare
   ENG140 Major British Writers I (may double-count as a historical sequence course)
   ENG144 Drama of the Western Tradition
   ENG150 Introduction to Medieval Literature
   ENG250 Medieval Literature Seminar
   ENG251 Chaucer
   ENG253 Advanced Shakespeare
   ENG254 Still Spaces—East Meets West
   ENG255 Studies in the Renaissance
   ENG256 Shakespeare from Page to Stage
   ENG294 History of the English Language
2. Each major must take at least one 200-level course of literature between 1700 and 1900 (C-2), such as:
   ENG260 Studies in 18th-Century British Literature
   ENG262 Studies in 19th-Century British Literature
   ENG263 British Romantic Literature
   ENG265 Victorian Literature
   ENG268 Regendering History: British Women Writing History
   ENG280 Early-American Pop Culture
   ENG281 American Literary Renaissance
   ENG282 Studies in 19th-Century American Literature
   ENG283 Visions of Representation 1860-1920
3. Each major must take at least one 200-level course of literature after 1900 (C-3), such as:
   ENG230 Southern Writers of the 20th Century
   ENG231 William Faulkner
   ENG239 Aliens and Others in Science Fiction
   ENG270 African American Satirical Novel
   ENG272 Radical Thought and the Black Arts Movement, 1966 to 1976
   ENG275 Postcolonial Literature
   ENG276 Ethnic America: Literary and Theoretical Perspectives
   ENG279 Fictions of Asian American
   ENG291 Literature of the Harlem Renaissance

D. Theory or Criticism (1 course)

Each major must take at least one 200-level seminar in the theory or practice of criticism (D), such as:

ENG240 20th-Century Critical Methods
ENG245 Mythopoetics
ENG248 Contemporary Literary Theory
ENG249 Signs and Crossroads: Semiotic Theory and Practice
ENG252 Cultural Discourses of Advertising
ENG270 African American Satirical Novel
ENG277 Race and Gender in African American Literary Theory
ENG295 Gender and Discourse
ENG340 Introduction to Graduate Study
CMLT251 Seminar in Literary Criticism

E. Capstone Requirement (E)

All English majors must take the Capstone course, ENG290.

F. Area of Specialization

As early as possible, in combination with an adviser, an English major should select an *Area of Specialization* (seven courses, four of which are typically fulfilled by core courses in the major).

Students may substitute a second major, a University concentration, or a minor for the *Area of Specialization* as long as they demonstrate the links between the English major and the substituted area of study in the capstone or in another appropriate course.

Descriptions of areas of specialization with lists of required and recommended courses are available from the department.

Honors Program

At the end of the academic year, the faculty identify qualified junior majors and invite them to work on a yearlong honors thesis during their senior year. Other students who wish to take honors in English should identify an area of interest, consult with an appropriate honors adviser, and apply to the department chair before the end of the junior year.

English Minor

A minor provides a student majoring in another department with general background in English literature, as well as with skills in critical reading and writing. Ordinarily, the chair acts as adviser to minors. The minor in English requires at least six English courses, at the 100- to 200-level.

Each designation in parentheses in the descriptions below is used in course listings every semester in order to identify what requirements a course meets. Thus, if a course does not appear in the list below (for example, a new course), you can nonetheless readily see what requirements it meets through these designations.

1. One course in poetry (B-1)
2. One historical sequence (two courses) from the following (A):
   ENG133-134 Survey of Women Writers
   ENG140-141 Major British Writers
   ENG180-181 Major American Writers
   ENG182-183 African American Literature
3. One seminar in criticism from the following (D):
   ENG240 20th-Century Critical Methods
   ENG242 Feminist Critical Theory
   ENG248 Contemporary Literary Theory
   ENG249 Signs and Crossroads: Semiotic Theory and Practice
   ENG270 African American Satirical Novel
   ENG295 Gender and Discourse
   ENG340 Introduction to Graduate Study in English
4. At least two other English courses, one of which must be a 200-level seminar.

Graduate Program

The program leading to the Master of Arts in English encourages innovative, individually designed approaches of study and more traditional approaches to literature. The controlled size of the program fosters an atmosphere of intensive intellectual exchange among faculty and students. Teaching assistantships with tuition remission plus stipend and full- and part-time tuition-remission scholarships are available on a competitive basis.

Requirements

For the Master of Arts, the student must satisfactorily complete at least eight upper-level courses or seminars, which include ENG340 Introduction to Graduate Study and ENG397 Master's Thesis. Graduate students will receive 300-level designations for graduate-level course work in those 200-level courses deemed suitable for graduate credit and for which they are expected to complete extra graduate requirements. Students are also required to register for and participate in ENG390 Departmental Colloquium (no course credit), where they will present working drafts on some aspect of their thesis topics. In addition to completion of the master's thesis (ENG397), the student must pass a final oral examination.

Courses

ENG019 The Essay: Reading and Writing/Workshop

Students will read and consider contemporary essays, as well as write a variety of different types of essays, from academic and argumentative essays to more familiar, exploratory essays. Fulfills the Verbal Expression requirement. This course emphasizes revision. Staff/Offered every other year

ENG020 Introduction to Literature/Discussion

This seminar-sized course introduces students to three or more types of literary form (fiction, poetry and one other genre). Students will learn the most important tools of literary analysis, including the uses of metaphoric language, sound effects and rhetorical devices. Individual sections of Introduction to Literature may be centered on a particular theme, but in all sections, students will practice writing effective essays that analyze elements of literary form. Meets the Verbal Expression requirement. Staff/Offered every semester

ENG021 Literacy, Learning, Writing/Lecture, Discussion

What is literacy? Is it more than reading and writing? How should it be taught and who should learn? This class will introduce students to the challenging questions that inform contemporary literacy studies. In the first part of the course, students will read histories and theories of literacy. As the course proceeds, students will also think about their own literacies by constructing literacy autobiographies. Finally, by taking part in a community literacy project, students will reflect on their own roles as they engage with the literacies of their communities. Meets the Verbal Expression requirement. Staff/Offered every other year

ENG102 Documentary Writing

Documentary Writing will be a course centered on the art and craft of writing for all kinds of documentaries — both the theory behind the work and the application of that theory. You will be expected to write consistently throughout the term, a minimum of 10 hours a week, and you will complete preproduction scripts for at least two documentaries. You will also be expected to expand your understanding of documentaries by reading the course texts. Mr. Eldridge/Offered periodically

ENG103 The Poetics of Sex, Drugs, and Rock-n-Roll/ First-Year Seminar

This course will be a discussion and analysis of eros, transcendence and musicality within poetry through poets of different periods and movements — from the ancients to the contemporary. We will begin by reading the ancient Greek poet, Sappho, who called Eros "sweetbitter" and "the limb-loosener." We will discuss her work in connection (and disconnection) with contemporary ideas surrounding love and sexuality, reading other poets who take up her ideas as well as those who diverge. The second section of the course will deal in poets who have written about physical, spiritual and artistic transcendence. While we will begin this discussion with William Wordsworth and the Romantic poets, we will be focusing on various "poetry schools" in 1950s and 1960s America — the Beats, the New York School, the Black Arts Movement, and the Black Mountain School of Poets — to help us understand the various kinds of poetic transcendence and the influencing factors. The final part of this course will focus on music in poetry. We will be asking questions about the relationships between sound and meaning. How does the sound of a Shakespearian sonnet make an impact on its meaning? What do repetition and rhyme do to meaning? During this section, we will attend both a traditional "academic" poetry reading as well as a poetry performance to help us further this discussion, extending it to address the relationship between the written and spoken word. Finally, we will read poems that have been influenced by different kinds of music: jazz, Blues, classical and rock-n-roll. What is the relationship between the world of poetry and the world of music? Fulfills the Verbal Expression requirement. You must be placed at the verbal-expression level to be admitted into this seminar. Ms. Graham/Offered periodically

ENG104 To the Woods: Walden Today/First-Year Seminar

In a workshop setting, students will read "Walden," other selections by Henry David Thoreau including "On Civil Disobedience," and some related contemporary writings such as "The Monkey Wrench Gang" by Edward Abbey, "The Survival of the Bark Canoe" by John McPhee, "Silent Spring" by Rachel Carson, "Walden Two" by B. F. Skinner and "Last Child in the Woods," by Ricard Louv. The class will take a field trip to Walden Pond. Class discussions, exercises and weekly reflective essays will focus on understanding and analyzing the writings in their own context and on applying their perceptions and values to contemporary American concerns and issues such as self-reliance, solitude, our connections with nature, and the individual's relationship with government. The final term paper will allow students to use "Walden" and the other writings as windows into issues in disciplines of particular interest to them, including politics, religion, economics, science, art, literature, psychology and philosophy. Fulfills the Verbal Expression requirement. You must be placed at the verbal-expression level to be admitted into this seminar. Mr. Tapply/Offered periodically

ENG105 NEWS WRITING/WORKSHOP

Covers the basics of news writing, from reporting an event to writing an obituary. Students learn how to collect information, conduct interviews and organize writing into crisp news copy. Class work includes weekly deadline writing assignments. Homework: weekly writing exercises based on textbook examples and field assignments, as well as readings from texts and daily newspapers. Mr. Connolly/Offered every year

ENG106 CREATIVE WRITING: FICTION/WORKSHOP

For students who are inspired to write short or long stories. Equal emphasis on writing well and creating boldly, with focus on giving and receiving criticism in the workshop format. Students will be encouraged to "find their voices" by experimenting with style, genre and structure. Graded on a credit/noncredit basis only. Mr. Tapply/Offered every semester

ENG107 CREATIVE WRITING: POETRY/WORKSHOP

A significant part of the class will be dedicated to exploring each student's poetry through a constructive workshop approach. We will experience how poetry comes alive in voice and use these insights to develop both oral and written media of expression. Students are expected to bring creative work to each class. As the semester progresses, we will experiment with ways to edit a gathering of poems into a coherent manuscript. Finally, we will also talk about the nuts, bolts and jolts of getting published, as well as finding venues for public reading. This course could benefit both beginning and experienced writers. Not open to first-year students. For undergraduate English majors and minors, this course satisfies the Genre (B-1) requirement. Graded on a credit/noncredit basis only. Ms. Graham/Offered every year

ENG108 INTRODUCTION TO SCREENWRITING

This course is centered on the art and craft of screenwriting — both the theory behind the work, and the application of that theory. Students will be expected to write consistently throughout the term, a minimum of 10 hours a week, and complete a full first draft of a screenplay by the end of term. Students will also be expected to expand their film vocabulary through viewing selected films and reading the course texts. The goal of this course is to provide a full understanding of the theories and principles behind writing for the screen — and to provide a structure in which those principles and theories can be applied. Mr. Eldridge/Offered periodically

ENG110 ENGLISH POETRY I/LECTURE, DISCUSSION

Focuses on the development of important forms, themes and movements in English poetry. This course, which fulfills the poetry requirement for the English major, emphasizes intensive study and discussion of individual poems. It includes a series of essays on assigned topics and a sequence of poetry-writing exercises designed to enhance understanding of the demands of poetry form. Fulfills the Verbal Expression requirement. Strongly recommended for English majors in the first or second year; seniors by permission. For undergraduate English majors and minors, this course satisfies the Genre (B-1) requirement.
Ms. Graham/Offered every semester

ENG113 LITERATURE OF BASEBALL/FIRST-YEAR SEMINAR

Baseball has often been cited as "America's game," in the sense that it is thoroughly interwoven into the history of American culture. Many writers, particularly in the 20th century, have seen in the game fertile ground for describing their interpretations of the American experience. It is a game which offers tremendous variety within rigidly set boundaries. In short, baseball is a metaphor to which Americans return repeatedly to express their sense of identity. It is this general theme that this course will explore: why is baseball so attractive to American writers of all types, and how do they use the game and its players as the basis for suggesting who we are? Fulfills the Verbal Expression requirement. You must be placed at the verbal-expression level to be admitted into this seminar. Mr. Elliott/Offered periodically

ENG114 AMERICAN TALK/FIRST-YEAR SEMINAR

This seminar explores the distinctive character of talk in the United States, with emphasis on the ways in which talk is associated with groups and situational identities. The course revolves around understanding the dynamic and diverse nature of talk as a cultural code and resource. Topics include the linguistic markers of regional and social dialects, styles of speaking, public discourse forms such as presidential debates, and television and film representations of American talk. Ms. Johnson/Offered periodically

ENG115 SPECULATIVE FICTION/FIRST-YEAR SEMINAR

Speculative fiction (more popularly known as science fiction) entertains the "what if" and presents alternative conceptions of history, society and identity. Committed to exploring the possibilities and limitations of the alternative and the different, these works interrogate established boundaries of identities and provide critical perspectives on prevailing beliefs and ideologies. The course moves chronologically through works that fall loosely under the science fiction subgenres of fantasy/horror, alternative histories, future dystopias and political allegories. We will also devote some attention to formal analysis, specifically the ways in which science fiction narratives experiment with and break from traditional literary conventions to offer new ways of perceiving, constructing and deconstructing our social realities. Authors include Mary Shelley, H. P. Lovecraft, H.G. Wells, Isaac Asimov, Philip K. Dick, Ursula Le Guin, Octavia E. Butler, William Gibson, Neal Stephenson, Kim Stanley Robinson and Ted Chiang. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Ms. Huang/Offered periodically

ENG120 INTRODUCTION TO SHAKESPEARE/LECTURE, DISCUSSION

Designed for any student who wants an introduction to Shakespeare. Seven major plays are read and discussed in detail with an emphasis on performance. For undergraduate English majors this course satisfies the Period (C-1a) requirement. Ms. Vaughan/Offered every year

ENG121 SHAKESPEARE RECYCLED/FIRST-YEAR SEMINAR

This seminar explores the many ways Shakespeare's plays have been reproduced and adapted throughout the world in plays, novels, film, and television. Students also design their own projects, exploring such topics as Shakespeare in advertising, Shakespearean cartoons and comic books, Shakespeare in musicals, and Shakespeare in contemporary film and television. For Fall 2007 we will focus on Shakespeare's "Taming of the Shrew," "King Lear," and "The Tempest."

ENG131 BORDER CROSSINGS: NARRATIVES OF JOURNEY, EXILE AND IMMIGRATION/FIRST-YEAR SEMINAR

The course examines narratives of journey, exile, immigration and displacement in modern literature and film that trespass geographical, political and linguistic boundaries, and create new literary spaces that define and reshape modern identities. We will explore Chicano, Native American, African, Arabic and Israeli literature. Authors read will include Laila Halaby, Sandra Cisneros, Amos Oz, Elias Khoury, Louise Erdrich, Ama Ata Aidoo and Naomi Shihab Nye. Close reading of texts will ground our interrogation and discussion of such themes and issues as margins, borders and borderlands, immigration, language and culture, community, hyphenated identity, war and conflict, race, gender and religion. Guest speakers, video excerpts, handouts and reserved articles will supplement our study. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Ms. Valerio/Offered periodically

ENG133 SURVEY OF WOMEN WRITERS I/LECTURE, DISCUSSION

Examines how women writers before 1900 address, confront, avoid, subvert and question traditional notions of gender, culture, domesticity, history, ethnicity and sexuality. Close attention is paid to textual reading, the historical and intellectual context of works, and different critical approaches to women's writing. Authors include Behn, Burney, Austen, Sedgwick, Chopin, Gilman, Foster and Wilson. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Prerequisite: verbal-expression course. Ms. Valerio/Offered every other year

ENG134 SURVEY OF WOMEN WRITERS II/LECTURE, DISCUSSION

Examines developments in British and American prose fiction by women in the 20th century. Authors include Cather, Woolf, Lessing, Rhys, Silko, Morrison, Winterson, Cisneros and Kincaid. Close attention is paid to textual reading and defining, revising and challenging traditional definitions and expectations of women's writing on various levels: thematic, linguistic and formal. The course also addresses current critical approaches to women's writing. For undergraduate English majors and minors this course partially satisfies the Historical Sequences (A) requirement. Prerequisite: verbal-expression course. Ms. Valerio/Offered every other year

ENG135 THE SHORT STORY/LECTURE

This course involves intensive reading of stories that exemplify a variety of fictional methods and affords the student some knowledge of the history of this literary type. Attention will be paid to the international scope of the short story, particularly in the 20th century. For undergraduate English majors, this course satisfies the Genre (B-2) requirement. Mr. Elliott/Offered every year

ENG140 MAJOR BRITISH WRITERS I/LECTURE, DISCUSSION

The lecture/discussion sequence ENG140-141 takes an historical approach to British literature from the Middle Ages to the dawn of the 20th century. This course concentrates on medieval and early modern English literature (1000-1700); it will examine major works by such authors as Sidney, Spenser, Shakespeare, Donne, and Milton (among others). For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) and Period (C-1a) requirements for majors. Mr. Bastien/Offered every year

ENG141 MAJOR BRITISH WRITERS II/LECTURE, DISCUSSION

This course examines British literature by major authors from 1700 to the late-19th century in drama, the novel, poetry and prose nonfiction. Texts to be studied will include works by Centlivre, Swift, Defoe, Blake, Wordsworth, Shelley, Dickens, Brontë, Wilde and Conrad. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Ms. Kasmer/Offered every year

ENG143 TERRIBLE BEAUTY: THE ART OF TRAGEDY/LECTURE, DISCUSSION

This course examines the historical evolution of tragedy and its central place in Western literary expression. Beginning with the three classical exemplars, Aeschylus, Sophocles and Euripides, we trace tragedy through Roman closet drama (Seneca), Renaissance masters (Shakespeare) and European interpretations (Racine, Schiller), to both modern experimental tragedy (Miller) and modern attempts to revive the classical model (Eliot). For undergraduate English majors this course satisfies the Genre (B-2) requirement. Mr. Bastien/Offered every other year

ENG144 DRAMA OF THE WESTERN TRADITION/LECTURE, DISCUSSION

Surveys the traditional dramatic canon of the western tradition. Course readings will include plays by Euripides, Sophocles, Shakespeare, Webster, Jonson, Molière, Congreve, Sheridan, Ibsen and Beckett (among others). For undergraduate English majors this course satisfies the Genre (B-2) and the Period (C-1a) requirements. Mr. Bastien/Offered every other year

ENG145 FABULAE: THE GENRE OF ROMANCE/LECTURE, DISCUSSION

This course examines the tradition of the romance genre, from classical antiquity to the present. Texts read range from early Greek "novels" and Medieval metrical romances, through the Gothic tale and Romantic poetry to contemporary forms such as science fiction, fantasy and horror. Along the way, students will be able to see how the general conservative elements of a given literary form are transmuted to accommodate a number of specific contexts. For undergraduate English majors this course satisfies the Genre (B-2) requirement. Prerequisite: verbal-expression course. Mr. Bastien/Offered every other year

ENG146 OLIVER TWISTED: THE LITERATURE OF THE FANTASTIC/LECTURE, DISCUSSION

This course investigates the development of the idea of the fantastic in both modern and postmodern fictions. From the theoretical considerations of such critics as Todorov, we read through texts that exemplify the variegated modes the fantastic can take, from the "ghost story," fantasy, science fiction and fairy tale, to "magical realism," the utopian/dystopian novel and "experimental" fiction. For undergraduate English majors this course satisfies the Genre (B-2) requirement. Mr. Bastien/Offered every other year

ENG147 THE PHILOSOPHY OF HORROR/FIRST-YEAR SEMINAR

Horror long has been a preferred form of entertainment for western audiences — European, British and American — for several centuries. It has permeated all media, print (novels and magazines), radio, television and film, and established a rather unusual aesthetic: the paradox of delight in fright. Although the phenomena of fear and awe have always been present in the western intellectual heritage — notions of the sublime and of beauty manifest in the grotesque and terrifying — the genre of horror has developed into a prominent industry. This course examines the evolution and ideological bases of the horror genre, from its inception in 18th-century Gothic to contemporary forms. We look at the origins, history, elements, structure, assumptions and iconography of this pervasive and curious transmedial form of entertainment. Authors and films will both be included, from Shelley, Poe and Stoker to Kafka, King and Ridley Scott's "Alien." Mr. Bastien/Offered periodically

ENG150 Introduction to Medieval Literature/Lecture, Discussion
Introduces western European medieval literature, touching on classical roots and contemporary counterparts in the process. Topics covered may include literary forms (epic, romance), social concerns (religion, the role of women, politics) and myth. Works read and discussed are selected from Anglo-Saxon, Anglo-Norman, Celtic and Middle English authors, and range from Beowulf and Marie de France's Lais to the Gawain-poet and Dante. For undergraduate English majors, this course satisfies the Period (C-1a) requirement. Mr. Bastien/Offered every year

ENG164 The 19th-Century British Novel/Lecture, Discussion
This course examines the 19th-century British novel, the predominant literary form in mid-to-late 19th-century Britain. With specific attention to both literary form and historical contexts, we will learn how the novel as a genre shaped and was shaped by 19th-century British culture, mired in the scientific revolution, the "woman question," the issue of class, and imperialism. We will then trace the impact of this form by examining 20th-century novels and films in conversation with 19th-century novels. By surveying these different works, we will develop a coherent theory of 19th-century fiction and situate the novel of that time period within the larger framework of the British literary tradition. For undergraduate English majors this course satisfies the Genre (B-2) requirement. Ms. Kasmer/Offered periodically

ENG180 Major American Writers I/Lecture, Discussion
The sequence ENG180-181 takes an historical approach to American literature from Puritanism to the present. This course concentrates on early American literature, circa 1620-1860, by authors such as Bradstreet, Rowlandson, Edwards, Franklin, Emerson, Douglass, Dickinson, Whitman, Hawthorne, Melville, Stowe and others. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Prerequisite: verbal-expression course recommended. Ms. Neuman/Offered every year

ENG181 Major American Writers II/Lecture, Discussion
This course traces the evolution of American literature and its major aesthetic movements from circa 1860 to the present. Writers and poets include Melville, Twain, Crane, Wharton, James, Williams, Eliot, Hughes, Cather, Fitzgerald, Hemingway, Faulkner, Pynchon and Morrison. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Prerequisite: verbal-expression course. Ms. Huang/Offered every year

ENG182 African American Literature I/Lecture, Discussion
Addresses major periods and principal authors of the African American canon. Readings may cover an historical span that could range from the 18th century to the present or could represent focused concern with select authors and/or a given literary movement. Students are expected to gain an historically as well as a culturally contextual appreciation of the literature produced by writers of African descent in the Americas. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Mr. Napier/Offered every year

ENG183 African American Literature II/Lecture, Discussion
Explores the aesthetic modes configuring the evolution of African American literature in the 20th and 21st centuries, especially the novel. Focus is on the experimental and innovative sensibilities regulating the evolving canon of postmodern writing produced by Americans of African descent. Authors studied may include David Anthony Durham, Percival Everett, Minister Faust, Edward P. Jones, Gayl Jones, Jamaica Kincaid, Toni Morrison, John Ridley, Fran Ross, Carl Hancock Rux, Olympia Vernon, Colson Whitehead and Kevin Young. For undergraduate English majors and minors, this course partially satisfies the Historical Sequences (A) requirement. Mr. Napier/Offered every year

ENG184 American Poetry/Discussion
This course will study a specific period of American poetry. The course will not only aim to make us all better readers of poetry but will also ask a number of contextual questions: How did audiences for and purposes of poetry change in particular time periods? What kinds of poetry have been "canonized" by later academics, and what kinds have not? What is the relationship between politics and poetry? Are cultural expectations formed by poetic expression, or do cultural norms and changes drive poetic innovation? How have conditions of publishing affected the writing of poetry?

Topic for Spring '08: The 19th Century Close-Up
A student may take this course more than once, as long as the topics differ each time. For undergraduate English majors and minors, this course satisfies the Genre (B-1) requirement. Mr. Bassett, Ms. Neuman/Offered every year

ENG196 Strategic Speaking/Workshop
Centers on oral presentation of current controversial issues and responses to rhetorical dilemmas. Topics include: rhetorical situations and audience analysis; forms of argument in persuasive speaking; supporting arguments with evidence; ethical communication practices; and dialogue processes to achieve better understanding of complex controversial issues. Students prepare three to four major speeches and complete a number of exercises. This course carries a Difficult Dialogues designation. Ms. Johnson/Offered every year

ENG202 Feature Writing/Workshop
An introduction to the art and craft of feature writing. The feature story is a rendering of reality into words, which, when done well, has its feet in both journalism and literature. We will discuss the elements of the feature story, as well as its various types and formats. We will learn how to find and develop stories, how to perform background research on subjects and how to interview. Course work will include reading and discussing feature stories and assigned texts. Students' stories will be read and discussed in class. Prerequisites: verbal-expression course; first-year students by permission. Mr. Dempsey/Offered every year

ENG203 Feature Writing II
Develops the skills learned in Feature Writing I and leads students toward publication of their work. We will study various outlets for feature stories and hear from editors and writers on breaking into markets. We will examine other forms of writing for techniques such as narrative, description, exposition and dialogue that may be put to use in own work. Libel and ethics will also be covered. Students should expect some demanding assignments. The aim is to produce pieces vibrant with the energy of the real. Prerequisites: Feature Writing I or permission. Not open to first-year students. Mr. Dempsey/Offered every year

ENG204 Writing for Magazines/Seminar
This course is for students who want to learn how to write articles they might actually sell to periodicals. We will emphasize such vital skills as: analyzing the markets, coming up with fresh ideas, slanting to the audience, researching and interviewing, creating killer leads, compos-

ing query and cover letters, submitting professional-looking manuscripts, writing to length, meeting deadlines and, especially, writing well. Grades will be based on weekly writing assignments, participation and attendance, and evidence of improvement. Mr. Tapply/Offered every year

ENG205 CULTURE AND THE NEWS/LECTURE, DISCUSSION

Examines the social, cultural, political and economic factors that go into constructing what we call news in North America and specifically in the United States. This course also examines the "nature" of news media, their purpose, content and uses in late 20th century and early-21st century America. Some of the major questions this course attempts to address include: How is news content determined and by whom and for what reasons? Who "owns" the news? How do news agencies and institutions "cover" local, national and international events and from what perspectives and why? Ms. Stephenson/Offered every year

ENG206 WRITING THE NOVEL I/WORKSHOP

This course is for students who want to write a novel. In workshop format, we will explore the elements of long fiction (character, plot, theme, setting, etc.), structure and development, writing styles and techniques, and issues such as giving and receiving criticism, revising and overcoming writer's block. Students will complete a working draft of the first 10,000 words of their novel. They will be encouraged, but not required, to continue working on their novels in ENG207Advanced Fiction Writing Workshop. For undergraduate English majors, this course satisfies the Genre (B-2) requirement. Mr. Tapply/Offered every year

ENG207 ADVANCED FICTION WRITING/WORKSHOP

The Advanced Fiction Writing Workshop offers students who are serious about writing fiction — short stories or novels — a supportive seminar setting to present their work for discussion and suggestions, learn how to critique the writings of others, and participate in discussions about the art and craft of fiction writing. Open to students who have already taken Creative Writing Workshop Fiction and/or Novel Writing I, or with the permission of the instructor. Mr. Tapply/Offered every year.

ENG208 ADVANCED CREATIVE WRITING: POETRY/WORKSHOP

This course is for students who have already taken a poetry workshop and have a portfolio of revised poems. Students will be expected to use their past experience as critic and writer so as to move more quickly into the process of publication, deeper analysis of classmates' work and assembly of their own cohesive body of work. Each student is expected to write a poem each week and post it on Blackboard. Additionally, each of us will be expected to read the first five poems posted and come to class prepared to discuss the work articulately and constructively. Our objectives in this class are to write better poems, continue honing our critical skills, understand and prepare ourselves for publication, and come to a greater understanding of the ways in which poets and poetry publications work. For English majors and minors this course fulfills the Genre (B-1) requirement. Graded on a credit/non-credit basis only. Ms. Graham/Offered every other year

ENG209 WRITING OUT LOUD/WORKSHOP

This is a course in which students will learn to listen and consider how the application of spoken word and performance strategies can strengthen their written work. Students will write nonfiction prose essays and will be taken through a series of exercises involving a variety of mediums to help facilitate the writer's ear. By semester's end, students will write at least two essays, one of which will be performed in a public setting. A play is unique in that it contains the written word spoken and experienced collectively. Conversely, we read essays privately, in our own space and time. But what if one is to write with the idea that a work will eventually be performed out loud? How is the writing style and process affected? What methods are used by those who write and deliver prose? What is the difference between the essay that is meant to be read and the essay meant to be spoken? Is there a difference or should there be a difference? Writing Out Loud is not an acting class. It is not a course in public speaking or speech writing. Nor is it a course intended to develop the performance artist. Rather, we feel that techniques employed within these mediums will serve to help writers develop their writing skill. Writing Out Loud is a workshop course designed to help writers listen. The class is by permission only and it is not open to first-year students. Students must submit a portfolio of writing for review. Mr. DiIorio/Offered every other year

ENG215 LANGUAGE AND CULTURE IN THE UNITED STATES/ LECTURE, DISCUSSION

Using a cultural perspective on language, this course addresses varieties of language use and their consequences in the United States. Topics include demographics in sociolinguistic perspective; the systematic nature of language; language and culture of African Americans, Asian Americans, Hispanic Americans; gender patterns in language; bilingualism and multilingualism in the United States; and the policy implications of language diversity. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Ms. Johnson/Offered every year

ENG229 PLAYWRITING

See Theater Arts 230.

ENG230 SOUTHERN WRITERS OF THE 20TH CENTURY/SEMINAR

Much of the best writing in the United States in the 20th century came out of the South, a section that is quite diverse economically, demographically, politically and culturally, and a region that changed a great deal during that century. Because of sectional conflict, the Civil War and the Reconstruction experience, it is also the region most self-conscious about itself as a region. Study of some of the strongest writers provides an opportunity for rewarding examination of relationships among social, racial, economic and literary factors, as well as an opportunity to compare literary features of their works with those of writings from other parts of the country. Focus is on writers working between the 1920s and the early 1960s, a period sometimes called the Southern Renaissance. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Mr. Bassett/Offered periodically

ENG231 WILLIAM FAULKNER/SEMINAR

This course will focus on the Yoknapatawpha fiction of William Faulkner, those novels and stories set in "the little postage stamp of native soil" that he created and developed more than three decades. As probably the strongest American novelist of his generation, certainly the one most clearly canonical, Faulkner invites consideration from many perspectives and, indeed, his fiction has been the chosen subject for some very good commentary by critics and scholars of almost every poststructuralist, as well as more traditional perspective. We will consider Faulkner as Modernist, as American writer, as Southerner and in any other way our discussion leads us. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Mr. Bassett/Offered periodically

ENG235 ADVANCED PLAYWRITING WORKSHOP
See Theater Arts 235

ENG239 ALIENS AND OTHERS IN SCIENCE FICTION/SEMINAR
This course examines literary figurations of "the alien" in science fiction, with specific focus on the subgenre of "first contact" narratives. Analyses of the genre will take critical and theoretical approaches to investigate constructions of otherness and difference, as well as critiques of the discourses and histories of humanism, colonialism, slavery and identity politics. Short fiction and novels by H.G. Wells, Arthur C. Clarke, Ursula Le Guin, Philip K. Dick, Stanislaw Lem, Samuel R. Delany, Orson Scott Card, Octavia E. Butler, among others, will be read. Feature films and television series that deal with alien contact will also be studied. For undergraduate English majors this course satisfies the Period (C-3) requirement. Ms. Huang/Offered periodically

ENG240 LITERARY ANALYSIS AND CRITICAL STRATEGIES/SEMINAR
Examines the primary movements in 20th-century European and American literary criticism. Beginning with Russian Formalism and continuing with New Criticism, Structuralism, Deconstruction and New Historicism, this course investigates the critical theories and philosophical assumptions that have directed contemporary literary studies away from mere explication toward a concern with the epistemological, cultural and ideological groundings of the text. Practical application of critical strategies is stressed. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Mr. Napier/Offered every year

ENG245 MYTHOPOETICS/SEMINAR
This course examines modes and qualities of literary expression where we will find that narratives and poetry convey different expectations, which are also embedded in a variety of world views. Frequently, however, authors will attempt to craft these expectations and world views to accommodate nontraditional visions. Toward this end, we will read works by authors who strive to come to grips with their own experiences of the world. Texts will include Eliot's "The Waste Land," Woolf's "The Waves," Plath's "Ariel," Joyce's "Portrait" and representative poems by Stevens and Yeats. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Mr. Bastien/Offered every other year

ENG248 CONTEMPORARY LITERARY THEORY/SEMINAR
Investigates and develops several theoretical approaches to literature in the late-20th century, attempting to provide glimpses into the range of theoretical issues and concerns. We look particularly at identity formation in contemporary literary, political, economic, cultural and social arenas. May also look at a literary text in relation to theory. General areas of study are selected from among the following: textual criticism, new criticism, psychoanalysis/reader response, structuralism, poststructuralism, feminism, postcolonialism, postmodernism, gay and lesbian theory. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Mr. Elliott/Offered every year

ENG249 SIGNS AND CROSSROADS: SEMIOTIC THEORY AND PRACTICE/SEMINAR
Approaches semiotic theories comparatively from historical as well as theoretical points of view and practices them by drawing on literature, film, advertising and drama. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Ms. Gertz/Offered periodically

ENG250 MEDIEVAL LITERATURE/SEMINAR
Explores medieval literary culture of Western Europe by means of literary theoretical and classical texts. For undergraduate English majors, this course satisfies the Period (C-1b) requirement. Themes vary each year, and the seminar can be taken more than once for credit, as long as each time a different theme is chosen. Ms. Gertz/Offered periodically

ENG251 CHAUCER/SEMINAR
Guides the student through "The Book of the Duchess," "The House of Fame," "The Parlement of Fowls," some "Canterbury Tales" and/or "Troilus and Criseyde." All texts are taught in Middle English, and selections may vary. No prior knowledge of Middle English required. For undergraduate English majors, this course satisfies the Period (C-1b) requirement. Ms. Gertz/Offered periodically

ENG252 CULTURAL DISCOURSES OF ADVERTISING/SEMINAR
Focuses on the ways in which discourse elements in advertising draw upon, circulate, and create new cultural codes. Patterns and codes of "verbal imaging" that structure ads are explored in the context of visual properties, intertextualities and ideology. Through the perspective of critical discourse analysis, emphasis is given to the relationship of advertising discourse to larger cultural discourses and ideology. For undergraduate English majors, this course satisfies the Theory or Criticism (D) requirement. Prerequisite: COMM101. Ms. Johnson/Offered every year

ENG253 ADVANCED STUDIES IN SHAKESPEARE/SEMINAR
Explores recent trends in research and criticism of Shakespeare's texts. We will study 10 plays; texts, topics and focus vary from year to year, but include feminist and new historicist interpretations, performance criticism and theater history. For undergraduate English majors this course satisfies the Period (C-1b) requirement. Prerequisite: ENG120 or TA214. Ms. Vaughan/Offered every year

ENG254 STILL SPACES–EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM/SEMINAR
This course aims to explore and gain experience of contemplative practices as they have evolved in both European and Asian cultures. In addition to reading and writing about key texts that engage the "still space," outside the classroom students will participate in a yoga course for seven weeks. The concepts of "ki" (centeredness) and "tao" (the way) will be probed through the tools of the metaphor and the narrative. For undergraduate English majors this course satisfies the Period (C-1b) requirement. Ms. Gertz/Offered periodically

ENG255 STUDIES IN THE RENAISSANCE/SEMINAR
Explores the poets, playwrights and prose writers who shaped the English literary Renaissance. Authors may include More, Sidney, Spenser, Marlowe, Wroth, Donne, Shakespeare, Cary, Herbert, Jonson, Middleton and Webster. Their writings are placed in the gendered sociopolitical context of the 16th and 17th centuries. For undergraduate English majors this course satisfies the Period (C-1b) requirement. Prerequisite: permission of the instructor. Ms. Vaughan/Offered every other year

ENG256 SHAKESPEARE FROM PAGE TO STAGE/LECTURE, WORKSHOP
Using four major plays, this course will provide historical context for understanding Shakespeare's texts, exposure to close analysis of Shakespeare's language (from both poetic and performance perspectives), as well as experience in acting Shakespearean roles. Students will be required to rehearse and perform scenes and monologues from

four plays. Simultaneously, students will explore the texts' historical contexts, looking in particular at early modern constructions of gender, kinship, social status and race. For undergraduate English majors, this course satisfies the Period (C-1b) requirement. Ms. Vaughan and Mr. DiIorio/Offered periodically

ENG257 Language at Issue/Seminar

Centers on current language policy issues in the United States. Focuses on issues such as speech codes, bilingual education, policies that dictate "English Only" in the workplace and other situations, language translation in the legal process, and efforts to make English the official language of the United States. Issues are considered from the perspective of academic scholarship, media representations, legislative actions, and legal perspectives. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Ms. Johnson/Offered every other year

ENG260 Studies in 18th-Century British Literature/Seminar

"Making Sex": Gender and Sexuality in the 18th-Century Novel

This semester's topic traces the development of the English novel during the 18th century, focusing on its construction of masculinity and femininity through the discourses of sexuality and sentimentality. Social, cultural and economic constituents of the rise of the novel will be examined, as well as the popular, romance and pornographic 18th-century novel. In this course, we will take up current theories about the construction of subjectivity, sexuality and gender in the novel. A student may take this seminar more than once, as long as the topic for the course is different. For undergraduate English majors this course satisfies the Period (C-2) and the Theory or Criticism (D) requirement. Ms. Kasmer/Seminar offered every other year with different topics

ENG262 Studies in 19th-Century British Literature/Seminar

Jane Austen in Hollywood

This course will consider the current cultural impact of the novels of Jane Austen, one of the most important novelists of the Regency period. Austens novels will be read with attention to cultural context, her contemporaries views, and recent literary criticism to place her work within the context of its intellectual, literary and cultural history. We will then examine the ways in which Austen's ideals have been incorporated into contemporary society, concentrating on films, examining the intersection between Austen's novels and contemporary adaptations. This course will also look at film theory and the nature of adaptation and include weekly film screenings. A student may take this seminar more than once, as long as the topic for the course is different. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Ms. Kasmer/ Offered every year

ENG263 British Romantic Literature: Race and Revolution in Romanticism/Seminar

The period from the end of the 18th century to the mid-19th century was one of great expansion and empire building for England, but at what cost? In 1772, after the Mansfield Judgment proclaimed that England was "a soil whose air is deemed too pure for slaves to breathe in," the issue of slavery, as well as the issue of British identity, became particularly contested. This course will examine issues of slavery and colonial rule, as well as the ideals of political and social freedom through poetry, novels and memoirs of the Romantic period. We will examine works that speak to the issues of slavery and revolution, as well as narratives by former slaves. We will also be looking at the ways in which notions concerning the British Empire impacted attitudes toward Englishness, attitudes that still hold sway today. Particular attention will be paid to the ways in which gender affected these issues. To understand the cultural context of race and slavery, the course will also incorporate postcolonial criticism. For undergraduate English majors this course satisfies the Period (C-2) requirement. Ms. Kasmer/Offered periodically

ENG265 Victorian Literature/Seminar

Authors studied may include Charles Darwin, Charles Dickens, Alfred Tennyson, John Stuart Mill, Charlotte Brontë, Thomas Hardy and Oscar Wilde, as well as less familiar but important people such as Henry Mayhew and Harriet Taylor. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Ms. Kasmer/Offered periodically.

ENG268 Regendering History: British Women Writing History/Seminar (C-2)

In 1771, Sir William Blackstone, a British jurist, delineated a woman's lack of rights: "By marriage the husband and wife are one person in law: that is, the very being or legal existence of the woman is suspended during the marriage, or at least is incorporated and consolidated into that of the husband." In the late-18th and early-19th centuries, although British women had no real political rights, they entered the public world by contributing to the writing and "rewriting" of history. This course will examine women's contribution to public discourse through an examination of women's shaping history through their history writing and their re-imagining history through their historical fiction, which provided alternative or utopian visions. We will also explore the current popularity of historical fiction among women writers and examine their relationship to history as well. Through this course, students will gain an understanding of the nature historiography, or conceptualizations of history, as well as gender politics within the long 18th century. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Ms. Kasmer/Offered periodically

ENG269 Transgression and Policing: 18th-Century Culture and Society/Seminar

In Britain and France, the 18th century was a time of momentous and uneasy transformation. Political, economic, social and scientific shifts undermined old political systems, as well as hierarchies of rank and gender. In every way, Europeans were overstepping the boundaries that had, at least in theory, defined their reality for preceding centuries. As old norms were threatened, efforts were made to carefully "police" political and social acts. Essential to this policing was the redefinition of what was considered transgressive. Using an interdisciplinary approach that will combine the study of history and literature, this course will examine the social, cultural, political and intellectual developments of 18th-century Britain and France through the lens of policing and transgression. We will explore the conditions that defined these movements as transgressive and track how forces of policing and change together created new norms. Students will read historical monographs, literature and other primary sources, which will be interpreted both as literature and as historical evidence. Prerequisite: Permission of instructors. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Ms. Kasmer, Ms. Kusher/ Offered periodically

ENG270 The African American Satirical Novel/Seminar

This course offers a survey of the emergence and development of the African American satirical novel from 1931 to the present. Students will have the opportunity to study novels that critique with disparaging humor the absurdities of interracism, intraracism, sexism, cultural indoctrination and other forms of social vice and folly. As such, students will explore how black novelists use satire to produce critical commentary in a manner dispositionally distinct from that located in the traditional black protest novel. By studying 10 select novels, students will develop a historical as well as a constitutional sense of the distinct nature of African American Juvenalian, Horatian and Mennipean satire. Accordingly, students are expected to emerge with an understanding of the dominant aesthetic assumptions, themes and critical moods defining African American novels of satire. For undergraduate English majors this course satisfies the Period (C-3) and the Theory or Criticism (D) requirement. Mr. Napier/Offered every other year

ENG272 RADICAL THOUGHT AND THE BLACK ARTS MOVEMENT, 1966 TO 1976/SEMINAR

The Black Arts Movement remains the most radical realization of a literary culture in the history of the United States. Resulting from centuries of racial oppression, this movement is to be understood as black Americans revolutionary use of art to express deep-seated existential rage and political critique in order to generate social change and psychological reconstruction. Accordingly, this course will examine the historical factors responsible for the emergence of the Black Arts Movement and will pay special attention to the thinkers and writers responsible for the articulation of its aesthetic manifestos and the production of its literary canon. Individuals to be studied include Amiri Baraka, Ed Bullins, Hoyt Fuller, Marie Evans, Addison Gayle, Carolyn F. Gerald, Nikki Giovanni, Sam Greenlee, William Melvin Kelley, Etheridge Knight, Haki Madhubuti, Larry Neal, Sonia Sanchez and John A. Williams. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Mr. Napier/Offered every year

ENG275 POSTCOLONIAL LITERATURE/SEMINAR

This seminar provides an introduction to emergent literatures in English from formerly colonized regions in South Asia, Africa and the Caribbean. We begin by examining some of the earliest formulations of postcolonial theory — by writers such as Frantz Fanon, Aimé Cesairé and Albert Memmi — and their efforts to imagine alternative forms of community and nationhood outside the dualistic parameters of the Cold War. We then turn to a range of literature that challenges and revises the legacy of colonial identities, including conceptions of race and nation, gender and sexuality, and ethnicity and cultural difference. Themes we will consider include: the relationship between literature and political resistance; the transformation of metropolitan English writing and language; "subalternity" and problems of representation; writing from a position of displacement, exile and diasporization; and the persistence of colonial narratives in contemporary forms of imperialism. Among the authors to be discussed are Salman Rushdie, Arundhati Roy, Amitav Ghosh, Chinua Achebe, Buchi Emecheta, J.M. Coetzee, Jamaica Kincaid, V.S. Naipaul, Anita Desai, Derek Walcott and Zadie Smith. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Mr. Levin/Offered every year

ENG276 ETHNIC AMERICA: LITERARY AND THEORETICAL PERSPECTIVES/SEMINAR

This seminar investigates the ways in which the "American" and the "ethnic" continue to be perceived as mutually exclusive identity categories in contemporary United States fiction. Despite the nation's longstanding history as a nation of immigrants and its forecasted future as the most multiethnic and multilingual country in the world, the U.S. continues to resist the incorporation of its ethnic populations through overt and covert means of division, estrangement and discrimination. Students will read a wide range of texts by "ethnic" and "nonethnic" writers and theorists to explore the ways in which the nation's ethnic constituents are continually changing the definitions of its national identity, and to consider whether the American/ethnic dichotomy is real or imagined. For undergraduate English majors this course satisfies the Period (C-3) requirement. Ms. Huang/Offered periodically

ENG277 RACE AND GENDER IN AFRICAN AMERICAN LITERARY THEORY/DISCUSSION

Covering the development of African American literary theory from the 1970s to the present, this course examines the ways in which prevailing assumptions of race, gender and sexuality have influenced contemporary African American critical theorists concerning their speculations on literature and culture. Various movements represented by these theorists include cultural nationalism, structuralism, feminism, deconstruction, new historicism and queer studies. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Mr. Napier/Offered periodically

ENG279 FICTIONS OF ASIAN AMERICA/SEMINAR

With particular emphasis on the multiple meanings of "fiction," this seminar examines the ways in which the Asian American identity is constructed, imagined and contested in American literature and popular culture. Analyses will focus primarily on how texts and films produced within the last decade maintain or challenge established boundaries of the Asian American identity. Specific issues to be investigated include the model minority discourse and the demands of assimilation and citizenship; ethnic authenticity and hybridity; gender roles and sexual anxieties; cultural memory and nostalgia; and the commodification of Asian cultures and identities. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Ms. Huang/Offered every other year

ENG281 AMERICAN LITERARY RENAISSANCE/SEMINAR

Special topics in 19th-century literature through the Civil War invite in-depth consideration of how extraordinary cultural, political and technological changes made this one of the most vibrant and studied periods of the American literature.

TOPIC FOR FALL '07: TRANSCENDENTALIST VARIATIONS

We think we know who the Transcendentalists were and what they stood for, but how can we when they themselves so often disagreed? By moving beyond the usual Emerson essays and Thoreau's Walden, we will begin to form a more accurate picture of all the varied ways that these extraordinary and often radical thinkers saw the major issues of their day — from changes in the nature and practice of Christianity to the reasons and methods for abolishing slavery, from the call for an "original" American literature to the nuts and bolts of true social reform. We will explore not only the ways in which their ideas diverged from 19th-century American norms but also the ways in which they disagreed with each other on how best to awaken and transform their world. The topic of this course changes each year. A student may take this seminar more than once, as long as the topics differ each time. If taken at the undergraduate level, prerequisite: Major American Writers I or permission of the instructor. For undergraduate English majors this course satisfies the Period (C-2) requirement. Ms. Neuman/Offered every year

ENG282 Studies in 19th-Century American Literature/Seminar

An historical analysis of canonized and noncanonized American works from the second half of the 19th century. Historical contexts will be examined to explore the progression of interpretations directed at these works up to the present time. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Mr. Elliott/Offered periodically

ENG283 Visions of Representation: 1860-1920/Seminar

Explores the problematic assumptions of literary representation underlying American realism through selected works of American writers. Conventional interpretations of realist writing are often challenged by issues of race, class, gender and cultural contexts. Examines works by Twain, Howells, James, Dreiser, Jewett, Cather, Cooke, Chopin and others. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Mr. Elliott/Offered every other year

ENG284 Topics in 17th- and 18th-Century American Literature/Seminar

Special topics in the earliest periods of American letters provide a broad historical foundation for literary study in all fields as well as the opportunity for in-depth investigation of critical issues of colonial and early Republic culture such as gender, race, religious discourse, scientific progress and political contest. If taken at the undergraduate level, prerequisite: Major American Writers I or permission of the instructor. A student may take this seminar more than once, as long as the topics differ each time. For undergraduate English majors this course satisfies the Period (C-2) requirement. Ms. Neuman/Offered periodically

ENG290 Capstone/Seminar

The capstones purpose is to deepen and broaden each senior major's knowledge and interpretive skills. We will spend time on the aspects of English or American literature that the department feels every major should know. Throughout the semester, each student will work on a paper of his or her choosing (e.g., a research paper for another seminar, a part of the honor's thesis). Melville's "Moby Dick" will be the touchstone text for 2007. For undergraduate English majors, this course satisfies the Capstone (E) requirement. Seniors only. Ms. Neuman/ Offered every fall

ENG291 Literature of the Harlem Renaissance/Seminar

Addresses the momentous development of African American literary culture from roughly 1920 to 1935. This course explores the antecedent cultural forces of 19th-century Americas as well as the modernistic discourse of early-20th-century America in order to contextualize and appraise the major and minor figures of the Harlem Renaissance. This course will also examine those little known Harlem Renaissance women writers whose publications have remained largely forgotten. For undergraduate English majors, this course satisfies the Period (C-3) requirement. Mr. Napier/Offered periodically

ENG294 History of the English Language/Seminar

Examines changes in English mainly during the Anglo-Saxon and medieval periods. In addition to learning phonological and grammatical characteristics of the language during each period, the student examines language as a mirror of culture. For undergraduate English majors, this course satisfies the Period (C-1b) requirement. Ms. Gertz/ Offered periodically

ENG295 Gender and Discourse/Seminar

Focuses on how cultural conceptions of gender guide language use for males and females and on ways in which discourse in its cultural context constructs gender. The implications for language use of ideology, enculturation and socialization patterns, dominance and inequality, and cultural diversity are considered. Both theory and research are covered and students conduct their own research projects. For undergraduate English majors and minors, this course satisfies the Theory or Criticism (D) requirement. Ms. Johnson/Offered every other year

ENG297 Honors in English: Senior Year

Invited and interested students should identify an area of interest with an adviser and apply in writing to the department chair with a brief description of the project before the beginning of the senior year. Honors in English normally carries two credits. With the adviser's approval, students should register as ENG297 Honors in English for one credit in each of the two semesters of their senior year. The adviser and the student will agree on the project's stages. However, the department requires that a completed draft be turned in by the first day of the spring semester to the adviser. The final thesis is due three weeks before the last day of the spring semester classes. The department requires one copy of the final thesis. A second reader, chosen by the student and the adviser, participates in the final evaluation. Details are available in the handbook for English majors. Staff/Offered every year

ENG298 Internships

Offered for variable credit. Staff

ENG299 Directed Study

When asking a faculty member to sponsor directed study courses (299), the student should: 1) demonstrate competence to deal with the materials as literature and 2) present a well thought-out proposal. The student must take the initiative in selecting readings or carrying out the special project. Offered for variable credit. Staff

ENG390 Departmental Colloquium

ENG300 Pedagogy I

A one-on-one with a departmental faculty member on pedagogy. TAs only.

ENG301 Pedagogy II

An advanced one-on-one with a department faculty member enabling the graduate student to acquire expertise in teaching. TAs only. Prerequisite: ENG300

ENG302 Pedagogy III

For second-year graduate students who have been awarded a teaching assistantship. Advanced mentoring and classroom assignments as arranged with individual department faculty members. Information available from the chair. Prerequisite: ENG300 and ENG301.

ENG303 Pedagogy IV

A continuation of ENG302. See its listing for a complete description.

ENG330 Southern Writers of the 20th Century/Seminar

See English 230.

ENG331 William Faulkner/Seminar

See English 231.

ENG339 Aliens and Others in Science Fiction/Seminar

See English 239.

ENG340 INTRODUCTION TO GRADUATE STUDY IN ENGLISH/SEMINAR
Examines certain fundamental aspects of literary theory and considers the nature of and relationships among the three principal areas in the discipline—bibliography and textual analysis, literary history, and literary criticism emphasizing theory. M.A. candidates not specifically exempted are required to take this course. Seniors by permission of the instructor. Mr. Elliott/Offered every fall semester

ENG341 LITERARY ANALYSIS AND CRITICAL STRATEGIES/ SEMINAR
See English 240.

ENG342 GRADUATE SEMINAR: SPECIAL TOPICS

TOPIC FOR SPRING 2008: MATERIAL/TEXTS
In this class we will consider the material circumstances of texts, from production and publication to responses of individual readers, from the physical aspect of books to the kinds of literary, commercial and cultural realities they create. We will draw heavily on the varied, interdisciplinary field known as "history of the book," but throughout the questions we ask will be literary. How is the meaning of a text affected by its material circumstance, and might texts themselves shape extra-textual practices and production? We will initially focus on earlier American texts (through the 19th century). Seminar participants will be encouraged to explore archival resources in Worcester (including the American Antiquarian Society, Goddard Library Special Collections or other area collections). Ideally, participants will find ways to use methods and scholarship modeled in the class to enrich their own thesis work. Please note that some class meetings and course assignments will be conducted in off-campus locations. This graduate seminar, with different topics, will be offered on a rotating basis by full-time faculty. Ms. Neuman.

ENG345 MYTHOPOETICS/SEMINAR
See English 245.

ENG348 CONTEMPORARY LITERARY THEORY/SEMINAR
See English 248.

ENG349 SIGNS AND CROSSROADS: SEMIOTIC THEORY AND PRACTICE/SEMINAR
See English 249.

ENG350 MEDIEVAL LITERATURE/SEMINAR
See English 250.

ENG351 CHAUCER/SEMINAR
See English 251.

ENG353 ADVANCED STUDIES IN SHAKESPEARE/SEMINAR
See English 253.

ENG354 STILL SPACES–EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM/SEMINAR
See English 254.

ENG355 STUDIES IN THE RENAISSANCE/SEMINAR
See English 255.

ENG356 SHAKESPEARE FROM PAGE TO STAGE/LECTURE, WORKSHOP
See English 256.

ENG357 LANGUAGE AT ISSUE/SEMINAR
See English 257.

ENG360 STUDIES IN 18TH-CENTURY BRITISH LITERATURE/SEMINAR
See English 260.

ENG362 STUDIES IN 19TH-CENTURY BRITISH LITERATURE/SEMINAR
See English 262.

ENG363 BRITISH ROMANTIC LITERATURE: RACE AND REVOLUTION IN ROMANTICISM/SEMINAR
See English 263.

ENG365 VICTORIAN LITERATURE/SEMINAR
See English 265.

ENG369 TRANSGRESSION AND POLICING: 18TH-CENTURY CULTURE AND SOCIETY/SEMINAR
See English 269.

ENG370 THE AFRICAN AMERICAN SATIRICAL NOVEL/SEMINAR
See English 270.

ENG372 RADICAL THOUGHT AND THE BLACK ARTS MOVEMENT, 1966 TO 1976/SEMINAR
See English 272.

ENG375 POSTCOLONIAL LITERATURE/SEMINAR
See English 275.

ENG376 ETHNIC AMERICA: LITERARY AND THEORETICAL PERSPECTIVES/SEMINAR
See English 276.

ENG377 RACE AND GENDER IN AFRICAN AMERICAN LITERARY THEORY/DISCUSSION
See English 277.

ENG379 FICTIONS OF ASIAN AMERICA/SEMINAR
See English 279.

ENG381 AMERICAN LITERARY RENAISSANCE/SEMINAR
See English 281.

ENG382 STUDIES IN 19TH-CENTURY AMERICAN LITERATURE/SEMINAR
See English 282.

ENG383 VISIONS OF REPRESENTATION: 1860-1920/SEMINAR
See English 283.

ENG384 TOPICS IN 17TH- AND 18TH-CENTURY AMERICAN LITERATURE/SEMINAR
See English 284.

ENG390 DEPARTMENTAL COLLOQUIUM
Provides graduate students with guidance, expertise and resolution for the writing of the master's thesis. The chief requirement is an oral presentation, ordinarily given in the student's final semester of course work. Participation and registration are required; however, the colloquium does not carry course credit and is not included as one of the eight courses needed to fulfill M.A. requirements. Ms. Gertz/Offered every semester

ENG391 LITERATURE OF THE HARLEM RENAISSANCE/SEMINAR
See English 291.

ENG394 HISTORY OF THE ENGLISH LANGUAGE/SEMINAR
See English 294.

ENG395 GENDER AND DISCOURSE/SEMINAR
See English 295.

ENG397 MASTER'S THESIS
Prerequisite: permission of thesis adviser. Staff/Offered every semester

ENG398 Graduate Internships
Staff/Offered for variable credit

ENG399 Graduate Directed Study
Staff/Offered for variable credit

IDND018 Expository Writing/Workshop
Centered on student writing, this course teaches the writing process, emphasizing revision. Students write informal exercises and essays. This course is required of some students. Staff/Offered every semester

IDND022 Writing/Topics Workshop

Writing Travel

"It is such a kind yet cruel world. Such a vulnerable world. I'm astounded by it all." (From Kira Salak's "Mungo Made Me Do It") When we travel, we often learn more intensively than if we had remained in our familiar surroundings. Writing about travel encourages us to think about these lessons — to analyze more deeply the places we've seen, the things we've done and the selves that were a part of the experience. In this course we will be asking ourselves questions about place and travel (whether they include family vacations to the Cape or hiking adventures in the Himalayas). We will push ourselves to write beyond the formula of "I went here and then I went there"; rather, exploring the impact of the exterior world upon that of the interior. In other words, we will think seriously about the motives for our writing that go beyond the simple "telling" of where we went and what we did. Additionally, we will be reading and analyzing travel essays by professional travel writers. We will discuss the various structures for these essays, the researched information that is often part of them and the ways in which these authors use language to convey their experiences. This course is for the student who enjoys travel (although you don't have to have traveled extensively) and who is interested in improving writing skills. There will be four essays assigned, along with reading and in-class writing exercises. Fulfills the Verbal Expression requirement. Ms. Graham/Offered every year

IDND022.01 Writing the Beats

In the 1950s, a group of radical young writers shook up the literary world and redefined the way many youth in America viewed conformity. With their blatant rejection of the cultural values of postwar America, their assertion of individual freedom, and their experimentation with writing, drugs and sexuality, these writers formed the counterculture that became known as the Beat Generation. In this class, we will study a variety of important Beat works and theories, focusing primarily on the following: experimentation with writing; defiant individuality; alternative conceptions of spirituality, politics and sexuality; "hipness" and countercultural behaviors; the glorification of drug culture and "criminality"; and the Beats' impact on cultural history. Among the fiction, nonfiction, and verse works that we will study are Jack Kerouac's "On the Road," Allen Ginsberg's major poems (including "Howl" and "Kaddish"), and William S. Burroughs' "Naked Lunch." Although we will be reading Beat works, this class is primarily a writing workshop. You will deepen your understanding of the Beat lifestyle and individual Beat texts by reading, thinking critically, and, most importantly, writing about them. You will be writing both in and outside of class, and your writing assignments will vary from creative pieces to analytical essays to historical/cultural accounts of the Beats. Fulfills the Verbal Expression requirement. Ms. Plante/Offered every year

TA109 Contemporary Women Playwrights
See Theater Arts 109.

ENVIRONMENTAL SCIENCE

Program Faculty

Frederick Greenaway, Ph.D. - *Chair*
Charles Agosta, Ph.D.
Halina Brown, Ph.D.
Patrick Derr, Ph.D.
Timothy Downs, D.Env.
J. Ronald Eastman, Ph.D.
Jody Emel, Ph.D.
William Fisher, Ph.D.
Susan Foster, Ph.D.
Karen Frey, Ph.D.
Jacqueline Geoghegan, Ph.D.
Robert Goble, Ph.D.
Dale Hattis, Ph.D.
David Hibbett, Ph.D.
Dominik Kulakowski, Ph.D.
Laurence A. Lewis, Ph.D.
Todd Livdahl, Ph.D.
Yelena Ogneva-Himmelberger, Ph.D.
Colin Polsky, Ph.D.
R. Gil Pontius, Ph.D.
Samuel Ratick, Ph.D.
Deborah Robertson, Ph.D.
Dianne Rocheleau, Ph.D.
John Rogan, Ph.D.
Joseph Sarkis, Ph.D.
Jennie Stephens, Ph.D.
B. L. Turner, Ph.D.

Program Overview

The interdisciplinary environmental science major introduces students to physical, biological, geographical and policy aspects of the natural environment. Following a set of common core courses, majors choose one of three tracks: Earth Systems Science, Environmental and Conservation Biology, or Environmental Science and Policy. The major provides training for those who want to continue on to graduate school or establish management, fieldwork or laboratory careers in areas as diverse as ecology; conservation biology; teaching; environmental planning, protection or regulation; water or air monitoring; and policy development.

Advanced students are encouraged to undertake directed research or internships and may do a senior project for honors. Environmental science faculty come from a wide range of Clark's departments. Most are from Biology, Geography, and International Development, Community and Environment, but faculty with environmental interests are also to be found in departments as diverse as Chemistry, Economics, Government, Management, Philosophy, and Physics. Many of the research faculty of Clark's George Perkins Marsh Institute are also contributors to the Environmental Science major.

Undergraduate Requirements

Clark environmental science majors may elect to concentrate in one of three areas: Earth Systems Science, Environmental and Conservation Biology, and Environmental Science and Policy.

Students who have clearly developed interests in environmental science when they arrive at Clark may be interested in satisfying some of their perspectives with environmentally relevant perspective courses.

Environmental and Conservation Biology Track

Environmental biologists explore the ways in which organisms evolve and interact with one another and their environments. Levels of exploration can range from molecular evolution and genomics to ecosystem level function. Conservation biology makes up one component of this field, focusing on the biological knowledge necessary to preserve biodiversity. Because the loss of biodiversity has reached crisis proportions, we offer a focused curriculum that enables students to bring appropriate biological tools and knowledge to efforts to develop conservation strategies and policies.

This track is designed to provide this focus and to allow students to design a curriculum that will prepare them for research and teaching in environmental and conservation biology. The environmental and conservation track carries the following requirements. We recommend that students interested in obtaining both a strong background in environmental and conservation biology and policy consider completing this track and then the accelerated B.A./M.A. degree in environmental science and policy.

Environmental Science Core Courses (3)

These courses are intended to provide all students in the environmental science major with a common, general background and vocabulary in environmental science:

BIOL103 Principles of Environmental and Conservation Biology
Either BIOL101 and 102 or BIOL100 and 102 count as a substitute for 103.
EN101 Environment, Society and Technology
GEOG104 Earth Systems Science

Chemistry (2)

CHEM101, 102.1 Introduction to Chemistry I and II
CHEM103 Accelerated Introductory Chemistry may substitute for these two courses.

Mathematics and Statistics (2)

These pairs of courses offer students requisite mathematical and statistical skills for the discipline. The second statistics course must be approved by the ECB track adviser.

MATH120 Calculus I and BIOL106 Quantitative Methods or Statistics I, II (e.g. GEOG110 and GEOG247)

Biology Core Courses (4)

These courses provide students with the knowledge needed for more advanced study in the field.

BIOL102 Introductory Biology II
BIOL105 Evolution
BIOL118 Genetics
BIOL216 Ecology

Research Course in Biology (1)

These are courses that provide students with intensive research experiences that will enable them to develop the background needed to design and carry out their own research. With prior approval, courses in field programs may also satisfy this requirement.

BIOL201 Ecology of Atlantic Shores
BIOL219 Physiological Ecology of Marine Algae
BIOL224 Ecology of Disease Vectors
BIOL242 Animal Behavior
BIOL254 Molecular Systematics and Evolution

Seminar Course in Biology (1)

Seminar courses provide students with the opportunity to develop the ability to read and evaluate original literature and to develop verbal presentation and discussion skills at the same time they are exploring a new field of biology.

BIOL217 Ecology of Infectious Diseases
BIOL223 Topics in Marine Biology
BIOL243 Seminar in Evolution
BIOL252 Seminar in Mycology
BIOL256 Biology of Symbiosis
BIOL258 Conservation Biology

Natural Science Electives (1)

Selection of one or more courses from this list will enable students to broaden their backgrounds in environmental and conservation biology. This is not an exhaustive list. The Environmental Science director can approve other courses. Courses listed under research or seminar course option can also fulfill this elective.

BCMB271 Biochemistry I
BIOL110 Introduction to Botanical Diversity
BIOL114 Marine Biology
BIOL116 Forest Ecology
BIOL180 Introduction to Fungal Biology
BIOL220 Population Biology
BIOL244 Biological Clocks
BIOL302 Applied Ecology
CHEM131 Organic Chemistry
CHEM142 Environmental Chemistry
EN120 Discovering Environmental Science
EN241 Environmental Toxicology
GEOG102 Understanding Weather
GEOG114 Geomorphology
GEOG115 Introduction to Hydrology
GEOG190 Raster GIS
GEOG200 Land Degradation
GEOG232 Landscape Ecology
GEOG282 Advanced Remote Sensing
GEOG293 Digital Image Processing
PHYS110 Introductory Physics I

Courses in Environment and Society (2)

Selection of courses from this list will provide students with initial insights into the mutual impacts of the biological systems and human activities, as well as the processes entailed in decision making and policy development relative to environmental issues.

ECON157 Economics of Natural Resources and Environment
EN207 Climate Change, Energy and Development
GEOG126 Living in the Material World
GEOG180 Earth Transformed
GEOG224 Economy and Environment
GEOG250 Technology and Environmental Assessment
GOVT157 Politics of Environmental Issues in the United States
GOVT276 Environmental Law
PHIL131 Environmental Ethics

Other recommendations: Students interested in environmental and conservation biology, whose interests overlap with those of a biology faculty member, and who meet B.A./M.A. academic requirements, should seriously consider participating in the Accelerated B.A./Masters

Degree Program. This program enables students with career goals that include research to develop a much deeper understanding of the field and skills involved in hypothesis development, data acquisition and analysis, as well as written and verbal presentation skills.

Earth Systems Science Track

Earth Systems Science examines the structure and function of the parts of the earth—geosphere, hydrosphere and atmosphere—and how they interact to create the biosphere (zone of life). It is an integrated science that permits the earth system puzzle to be put together as whole, and is the foundation for a range of science and societal issues including global climate change, thinning of the ozone layer, landscape dynamics, and loss of biotic diversity.

The earth systems science track in the environmental science major emphasizes the structure and function of the terrestrial surface of the earth, including human land use and consequences, and the use of remote sensing and geographical information sciences for problem solving. Students completing this track are prepared for a large range of professional endeavors and advanced studies involving the geosciences, physical geography and GIScience. The earth systems science track carries the following requirements:

Environmental Science Core Courses (3)

These courses are intended to provide all students in the environmental science major with a common, general background and vocabulary in environmental science:

BIOL103 Principles of Environmental and Conservation Biology
EN101 Environment, Society and Technology
GEOG104 Earth Systems Science

Basic Skills (2; at least 1 at the 200 level)

These courses develop skills in statistics, modeling and database management.

ECON160 Introduction to Statistical Analysis
GEOG110 Introduction to Quantitative Methods in Geography
GEOG247 Intermediate Quantitative Methods in Geography
GEOG260 Quantitative Modeling
GEOG285 Spatial Database Development
MATH120, 121 Calculus I and II
PSYC105 Quantitative Methods may be accepted at the discretion of the Environmental Science Systems track adviser

Elective Introductory Environmental Systems Science Courses (5; 3 at the 100 level)

These courses include offerings in physical geography, hydrology, weather and climate, global warming, environmental chemistry and biodiversity.

BIOL114 Marine Biology
CHEM142 Environmental Chemistry
GEOG014 Weather, Climate and Landforms
GEOG022 Why Global Warming Matters (when offered as a lecture course and not a first-year seminar)
GEOG101 Introduction to Environmental Geology
GEOG102 Understanding the Weather
GEOG103 The Natural Environment of New England
GEOG114 Intermediate Geomorphology
GEOG115 Introduction to Hydrology and Water Resources
GEOG116 Forest Ecology

Elective Advanced Environmental Systems Science Courses (3; 2 from Geography, 2 must be at the 100/200 level)

These are more narrowly focused, upper-division courses in Earth Systems Science.

BIOL201 Ecology of Atlantic Shores
BIOL216 Ecology
BIOL220 Population Biology
BIOL224 Ecology of Disease Vectors
BIOL258 Conservation Biology
GEOG232 Landscape Ecology
GEOG234 The Geography of Fire
GEOG263 The Climate System and Global Environmental Change
GEOG271 Groundwater Hydrology and Management
GEOG281 Tropical Ecology

Human-Environment Courses (2)

Human interaction with the global environment is addressed here, from economic, political, management, ethical, cultural and legal perspectives.

ECON157 The Economics of Natural Resources and the Environment
EN207 Climate Change, Energy and Development
EN261 Decision Methods for Environmental Management
GEOG126 Living in the Material World: The Political Geography of Resource Development
GEOG136 Gender and Environment
GEOG179 Globalization, Environment and Justice
GEOG180 The Earth Transformed by Human Action
GEOG200 Land Degradation
GEOG211 African Environments and Geographical Implications
GEOG224 Economy and Environment
GEOG226 Who Fears What and Why: Social Theories of Environmental Risks and Hazards
GEOG228 Management of Arid Lands
GEOG237 Feminism, Nature and Culture
GEOG239 Country and Culture
GEOG250 Technology and Environmental Assessment
GEOG277 Gender, Environment and Development
GEOG280 Urban Ecology: Cities as Ecosystems
GEOG284 Environment and Development in the Middle East and North Africa
GOVT276 Environmental Law
MGMT252 Corporate Environmental Management
PHIL131 Environmental Ethics

Skills GIScience (1)

These offerings allow students to develop the knowledge to use Global and Environmental imaging and information systems.

GEOG087 Introduction to Environmental Information Systems
GEOG190 Raster GIS
GEOG282 Advanced Remote Sensing
GEOG293 Digital Image Processing

Research Experience

This can be fulfilled by an appropriate capstone course, an internship, the HERO program (see Clark Web pages), directed research (EN299), or an honors thesis (EN297). The work must be presented as a poster at Academic Spree Day.

Environmental Science and Policy Track

The environmental science and policy track prepares students to deal with the complexities of environmental issues in society. The program provides students with an in-depth understanding of how human activity and technology are impacting the natural environment and provides social science and policy perspective on how these impacts can be minimized. The strong emphasis on the natural sciences ensures students understand the technical as well as the social aspects of the world's most pressing environmental issues.

The environmental science and policy track carries the following requirements:

Environmental Science Core Courses (3)

These courses are intended to provide all students in the environmental science major with a common, general background and vocabulary in environmental science:

BIOL103 Principles of Environmental and Conservation Biology
EN101 Environment, Society and Technology
GEOG104 Earth Systems Science

Statistics (1)

These courses provide analytical and statistical expertise necessary for the discipline.

BIOL106 Quantitative Methods in Biology
GEOG110 Introduction to Quantitative Methods

In some cases the Environmental Science and Policy track director may allow substitution with one of the following:

ECON160 Introduction to Statistical Analysis
GOVT107 Research Methods

Disciplinary Introductory Science Courses (3)

These courses provide background in the sciences, including biology, chemistry and physics. Chosen from the following, the courses must draw on at least two different disciplines:

BIOL102 Introductory Biology II
Either BIOL216 Ecology or BIOL105 Evolution
CHEM101 Introductory Chemistry I
CHEM102.1 Introductory Chemistry II
CHEM103 Accelerated Introductory Chemistry
PHYS110 Introductory Physics I
PHYS111 Introductory Physics II

Science Electives (3; at least one at the 200 level)

These courses may be chosen from a wide range of advanced science electives in biology, chemistry, geography and physics. At least one must be at 200-level:

BIOL114 Marine Biology
BIOL118 Genetics
BIOL201 Ecology of Atlantic Shores
BIOL216 Ecology
BIOL217 Ecology of Infectious Diseases
BIOL220 Population Biology
BIOL258 Conservation Biology
BIOL302 Applied Ecology
CHEM142 Environmental Chemistry
EN203 Biogeochemical Cycles and Global Change
EN241 Environmental Toxicology
GEOG101 Introduction to Environmental Geology
GEOG102 Understanding the Weather
GEOG103 The Natural Environment of New England
GEOG114 Intermediate Geomorphology
GEOG115 Introduction to Hydrology and Water Resources: A Geographical View
GEOG190 Raster GIS
GEOG232 Landscape Ecology
GEOG260 Quantitative Modeling
GEOG263 The Climate System and Global Environmental Change
GEOG271 Groundwater Hydrology and Management
GEOG281 Tropical Ecology
GEOG282 Advanced Remote Sensing

Or other intermediate/advanced science courses approved by the Environmental Science and Policy track adviser.

Social Science (2)

Chosen from a diversity of courses with emphasis on public policy approved by the Environmental Science and Policy track adviser.

ECON157 The Economics of Natural Resources and the Environment
ECON257 Environmental and Natural Resource Economics
EN124 Global Warming: How to Respond?
GEOG022 Why Global Warming Matters
GEOG025 Suburban Sprawl Under the Microscope
GEOG126 Living in the Material World: The Political Geography of Resource Development
GEOG127 Political Economy of Development
GEOG224 Economy and Environment
GOVT154 Politics of Public Policy in the United States
GOVT157 Politics of Environmental Issues in the United States
GOVT213 Policy Analysis
GOVT216 Comparative Environmental Politics
GOVT223 Suburban Policy Issues
GOVT281 Politics of Policy Implementation
SOC205 Sociology of Environment

Or other appropriate courses in social science with emphasis on public policy.

Environmental Science and Policy Courses (6)

Two Required Courses:

EN120 Discovering Environmental Science
EN290 Capstone Research

Four Electives (2 must be at the 200 level):

Chosen from advanced environmental science and policy courses.

ECON257 Environmental and Natural Resource Economics
EN103 The Sustainable University
EN207 Climate Change, Energy and Development
EN241 Environmental Toxicology
EN261 Decision Methods for Environmental Management and Policy
EN282 Management of Environmental Pollutants
GEOG226 Who Fears What and Why: Social Theories of Environmental Risks and Hazards
GEOG247 Intermediate Quantitative Methods in Geography
GEOG250 Technology and Environmental Assessment
GEOG260 Quantitative Modeling
GEOG280 Urban Ecology: Cities as Ecosystems

GEOG284 Environment and Development in the Middle East and North Africa
GOVT276 Environmental Law
MGMT252 Corporate Environmental Management
PHIL131 Environmental Ethics

Or other courses approved by the Environmental Science and Policy track adviser.

Honors Program

Students interested in honors in environmental science should contact the program faculty member with whom they would like to do research and then apply in writing, before the beginning of their senior year, to the program director for admission to honors. Normally a GPA of at least 3.0 will be required for admission. Once a student is admitted into the honors program, the student will register for at least two semesters of Honors Research in Environmental Science, EN297, or in the case of the Environmental Science and Policy track, EN290 and EN297. The student will carry out a directed-research project under the mentorship of a faculty member or other approved person for at least two semesters and write an honors thesis and give an oral presentation of their research. More information is available on the departmental Web site.

Environmental Science Minor

The requirements for a minor in environmental science are the following three introductory courses:

BIOL103
EN101
GEOG104

Plus any three advanced courses (100 level or greater) from the required or elective courses listed for any of the three tracks of the environmental science major that are not courses from a student's major department (including cross-listed courses) or courses used to fulfill the requirements of the student's major or other minors or concentrations.

Accelerated Degree Program

Environmental Science offers an accelerated B.A./Master's degree program to eligible students. For more information, visit www.clarku.edu/accelerate.

Courses

BCMB271/BCMB371 Biochemistry I/Lecture, Laboratory
See Biochemistry and Molecular Biology 271.

BIOL102 Introduction to Biology II/Lecture, Laboratory
See Biology 102.

BIOL103 Principles of Environmental and Conservation Biology/ Lecture, Laboratory
See Biology 103.

BIOL105 Evolution/Lecture, Laboratory, Discussion
See Biology 105.

BIOL106 Quantitative Methods in Biology/Lecture, Laboratory
See Biology 106.

BIOL110 Introduction to Botanical Diversity/Lecture, Laboratory
See Biology 110.

BIOL114 Marine Biology/Lecture, Field Trips
See Biology 114.

BIOL118 Genetics/Lecture, Laboratory
See Biology 118.

BIOL180 Introduction to Fungal Biology/Lecture, Laboratory
See Biology 180.

BIOL201 Ecology of Atlantic Shores/Lecture, Field Trip
See Biology 201.

BIOL216 Ecology/Lecture, Laboratory
See Biology 216.

BIOL217 Ecology of Infectious Disease/Seminar
See Biology 217.

BIOL219 Physiological Ecology of Marine Algae/ Lecture, Laboratory
See Biology 219.

BIOL220 Population Biology/Lecture
See Biology 220.

BIOL223 Topics in Marine Biology/Lecture, Seminar
See Biology 223.

BIOL224 Ecology of Disease Vectors/Lecture, Laboratory
See Biology 224.

BIOL242 Animal Behavior/Lecture, Laboratory
See Biology 242.

BIOL243 Seminar in Evolution/Seminar
See Biology 243.

BIOL244 Biological Clocks/Discussion, Lecture
See Biology 244.

BIOL254 Molecular Systematics and Evolution/Lecture, Laboratory
See Biology 254.

BIOL256 Biology of Symbiosis/Lecture, Laboratory
See Biology 256.

BIOL258 Conservation Biology
See Biology 258.

BIOL302 Applied Ecology
See Biology 302.

CHEM101 Introductory Chemistry I/Lecture, Laboratory
See Chemistry 101.

CHEM103 Accelerated Introductory Chemistry/Lecture, Laboratory
See Chemistry 103.

CHEM131 Organic Chemistry I/Lecture, Laboratory
See Chemistry 131.

CHEM142 Environmental Chemistry/Lecture, Laboratory
See Chemistry 142.

ECON157 The Economics of Natural Resources and the Environment/Lecture
See Economics 157.

ECON160 Introduction to Statistical Analysis/Lecture, Discussion
See Economics 160.

EN025 SUBURBAN SPRAWL UNDER THE MICROSCOPE/LECTURE, DISCUSSION, FIRST-YEAR SEMINAR
See Geography 025.

EN101 ENVIRONMENT, SOCIETY AND TECHNOLOGY
Technological development has contributed to both the cause of and the solution to many environmental problems. The complexity and uncertainty associated with environmental science has challenged societal efforts to protect environmental systems from negative human impacts. This course explores the complex societal associations among environmental science, technological development and attempts to reduce environmental impacts. A particular focus on climate change and energy technologies will be complemented with analysis of other areas including agriculture, food production, ozone depletion and water resource management. Formal lectures, readings, written assignments and class discussion will be included, as well as a weekly laboratory component. Fulfills the Natural Science Perspective. Ms. Stephens/Offered every year, spring semester

EN103 THE SUSTAINABLE UNIVERSITY
Institutions of higher learning, through both curriculum and management and operations, have a unique institutional capacity to educate and demonstrate environmental responsibility in their communities. This course will explore the environmental challenges facing society by focusing in on the college campus and the evolving movement of campus sustainability. Students will contribute to ongoing projects at Clark, including developing and maintaining a campus greenhouse-gas inventory, while also engaging in new efforts to promote sustainable practices and sustainable education at Clark and in the surrounding Worcester community. Topic areas to be investigated include climate change and energy (energy conservation and renewable energy), recycling, composting, green buildings, environmentally friendly purchasing policies, and more. This seminar is open to both beginning and advanced students and will involve both individual and group projects. This course will emphasize dialogue and the dialogic challenges and opportunities of promoting social and institutional change toward sustainability. Ms. Stephens/Offered every year, fall semester

EN120 DISCOVERING ENVIRONMENTAL SCIENCE/LECTURE, DISCUSSION
Covers key scientific and technical topics and emphasizes quantitative skills of problem solving. Topic areas include: mass and energy transfer, environmental chemistry, mathematics of growth, risk assessment, water pollution and air pollution. The course aims to provide a solid foundation in important scientific aspects of environmental problems, complementing policy-oriented courses. Above all, the course is designed to make students literate and comfortable with the language used to describe and analyze physicochemical processes. Study journals and homework problems are used to encourage literacy. Math skills emphasized. Mr. Downs/Offered every year

EN123 ENVIRONMENTAL ETHICS/LECTURE, DISCUSSION
See Philosophy 131.

EN124 GLOBAL WARMING: HOW TO RESPOND?/FIRST-YEAR SEMINAR
As global temperatures are increasing, sea level is rising, polar ice sheets are melting and more intense storms are occurring, the mounting scientific evidence linking these changes to human activity has resulted in a shift in the global warming debate. Rather than debating whether or not human activity is driving climate change, current debate revolves around how society should respond. In this first-year seminar, students will explore this debate by delving into the potential and the obstacles of various different societal actions that could be taken to reduce the risks and impacts of global warming, and explore how different countries and communities are responding. Shifting energy infrastructure toward renewable energy, designing transportations systems and community plans to reduce automobile reliance and associated emissions, and maximizing energy efficiency in buildings and industry are among the societal actions that will be investigated. An additional category of responses involves preparing for adaptation to inevitable or already occurring changes in climate. Students will learn about the many, complex technological, institutional, political, educational, and societal challenges associated with building the capacity for implementing the level of global change required to have an impact on minimizing the risks associated with our changing climate. Semester-long student projects will involve developing a proposal for implementing specific climate change response strategies at a specific scale, either local, regional, national or international, emphasizing the connections between local action and global change. Ms. Stephens/Offered every other year, fall semester

EN180 THE EARTH TRANSFORMED BY HUMAN ACTION/LECTURE, DISCUSSION
See Geography 180.

EN207 CLIMATE CHANGE, ENERGY AND DEVELOPMENT
This course explores the environment-energy challenge of development with a particular emphasis on climate change. Human burning of fossil fuels for electricity generation and transportation is changing the earth's climate by changing the composition of the atmosphere. As demand for energy increases in both developing and developed countries and the risks associated with climate change are becoming more evident, the challenges of confronting climate change are mounting. The challenges of climate change mitigation measures and the associated conflicts between developed and developing countries will be explored as will the uneven distribution of climate change impacts in the developing world. Adaptation to climate change as well as mitigation will be discussed. Ms. Stephens/Offered every year, fall semester

EN226 WHO FEARS WHAT AND WHY: SOCIAL THEORIES OF ENVIRONMENTAL RISKS AND HAZARDS/SEMINAR, LECTURE, DISCUSSION
See Geography 226.

EN241 ENVIRONMENTAL TOXICOLOGY/LECTURE
Focuses on the assessment of hazardous properties of toxic chemicals in the environment and on development of public-health policy. Covers the principles of absorption, distribution, excretion and toxic action of chemicals on humans; animal testing; and human epidemiology. Also covers assessment of public-health risks on the basis of animal and human test results, development of standards for air and water contaminants, and uncertainty in regulating hazardous chemicals. Prerequisite: one semester of organic chemistry or permission of the instructor. Ms. Brown/Offered every other year

EN252 CORPORATE ENVIRONMENTAL MANAGEMENT
See Management 252.

EN257 ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS
See Economics 257.

EN261 Decision Methods for Environmental Management and Policy/Lecture, Discussion

Information on environmental-impact assessments needs to be systematically organized and analyzed to be useful in the decision-making process. This course provides a survey of methods that are currently used to aid environmental decision makers (who include policy makers, environmental managers and affected populations). Covers techniques such as: decision analysis, benefit/cost analysis, multicriteria evaluation, multiobjective analysis, multiattribute utility theory, the analytical hierarchy process, and spatial-analytical methods using geographical information systems. These methods will be evaluated with respect to their theoretical foundations, systems formulation and appropriate application. A critical evaluation of the strengths and weaknesses of these methods will also be discussed. Mr. Ratick/Offered every year

EN263 The Climate System and Global Environmental Change/Lecture, Discussion

See Geography 263.

EN276 Environmental Law/Lecture, Discussion

See Government and International Relations 276.

EN277 Sustainable Consumption and Production

The increasingly unsustainable pressure on the Earth's natural systems calls for radical changes in the way people in the industrialized and in the rapidly growing economies satisfy their appetite for goods and services. Some believe that innovation in technologies is our great hope, while others emphasize the need to change the consumption patterns of individuals and societies. Both necessitate changes in institutions, values and social arrangements. This advanced seminar examines the role that changes in technology, institutions and culture might play in bringing about the necessary change toward more environmentally sustainable development. Four types of innovation are discussed: in the production process, in product design, in function delivery by way of products and services and in a larger sociotechnical system. The course draws on theories of technological innovation, consumer behavior and institutionalism as well as empirical case studies from the United States, Europe and some developing countries. The course considers the key drivers of change, such as government policy, market forces, cultural norms, activities of mission-oriented organizations, social movements and others. Ms. Brown

EN282 Management of Environmental Pollutants/Seminar

Studies approaches to regulating hazardous chemicals in air, water and food. The course is built around the three general types of interventions that have been practiced by regulatory agencies over the last three decades: shifting to safer technologies; issuing licenses to pollute in the form of industrial emission permits; and setting standards for air, water and food contaminants. The scientific controversies in setting standards and issuing permits are presented vis-à-vis the legislative mandates, the need for benefit-cost accounting and the scientific uncertainty. The strengths and weaknesses of command-and-control system versus the incentive-based system with regard to industrial enterprises are also discussed. Emphasizes recent efforts to decrease government involvement in corporate environmental management and to shift towards an incentive-based regulatory system. While focus is on public policies in the United States, international comparisons with Western European and Eastern European countries are included. The course has a seminar format, with weekly student presentations and class discussions. By instructor permission for undergraduate students. Required for environmental science and policy master's degree students. Ms. Brown/Offered every year

EN290 Capstone Research/Seminar

A required course for senior environmental science and policy majors, this seminar offers an opportunity to integrate the strands of the environmental science and policy major. The product will be a completed research project and a poster presentation. A research proposal for an honors project or a master's thesis is optional but strongly encouraged. Specific topics for investigation are chosen largely on the basis of student interest from a broad array including global environment threats, energy and other resource issues, community brownfields, and technological risk assessment and management. Unlike a regular course, student presentations constitute a major portion of class meetings, with the instructor as a facilitator of discussion and as a general resource for the group. Students must be seniors or second-semester juniors and must have completed a substantial fraction of their major requirements. Ms. Brown/Offered every fall

EN297 Honors Research/Seminar

Honors in environmental science requires directed research for at least two semesters under the supervision of a faculty member of the program, a thesis and an oral presentation. Prerequisite: permission of the Environmental Science director. Staff/Offered every semester.

EN299 Directed Study

Individual investigations involving research or advanced directed readings in the literature under the direction of a faculty member of the program. Prerequisite: permission of the instructor. Staff/Offered every semester

GEOG014 Weather, Climate and Landforms/Lecture, Laboratory

See Geography 014.

GEOG022 Why Global Warming Matters/Lecture, Discussion, First-Year Seminar

See Geography 022.

GEOG087 Introduction to Environmental Information Systems/Lecture, Laboratory

See Geography 087.

GEOG101 Introduction to Environmental Geology/Lecture, Laboratory

See Geography 101.

GEOG102 Understanding the Weather/Lecture, Laboratory

See Geography 102.

GEOG103 The Natural Environment of New England/Field Course

See Geography 103.

GEOG104 Earth Systems Science/Lecture, Labratory

See Geography 104.

GEOG110 Introduction to Quantitative Methods/Lecture, Laboratory

See International Development and Social Change 110.

GEOG114 Intermediate Geomorphology/Lecture

See Geography 114.

GEOG115 Introduction to Hydrology and Water Resources: A Geographical View/Lecture, Discussion

See Geography 115.

GEOG116 Forest Ecology/Lecture, Discussion
See Geography 116.

GEOG126 Living in the Material World: The Political Geography of Resource Development/Lecture, Discussion
See Geography 126.

GEOG127 Political Economy of Development/Lecture
See Geography 127.

GEOG136 Gender and Environment/Lecture, Discussion
See Geography 136.

GEOG179 Globalization, Environment and Justice/Lecture, Discussion, First-Year Seminar (in alternate years)
See Geography 179.

GEOG180 The Earth Transformed by Human Action/Lecture, Discussion
See Geography 180.

GEOG184 Nomads to Oil Sheikhs: The New Geography of the Middle East/Lecture, Seminar
See Geography 184.

GEOG200 Land Degradation/Seminar
See Geography 200.

GEOG211 African Environments and Geographical Implications/Lecture, Discussion
See Geography 211.

GEOG224 Economy and Environment/Lecture, Discussion
See Geography 224.

GEOG228 Management of Arid Lands/Lecture, Seminar
See Geography 228.

GEOG232 Landscape Ecology/Lecture, Discussion
See Geography 232.

GEOG234 The Geography of Fire/Lecture, Discussion
See Geography 234.

GEOG237 Feminism, Nature and Culture/Seminar
See Geography 237.

GEOG239 Country and Culture/Lecture, Discussion
See Geography 239.

GEOG247 Intermediate Quantitative Methods in Geography/Lecture, Laboratory
See Geography 247.

GEOG250 Technology and Environmental Assessment/Seminar
See Geography 250.

GEOG263 The Climate System and Global Environmental Change/Lecture, Discussion
See Geography 263.

GEOG271 Groundwater Hydrology and Management/Lecture, Discussion
See Geography 271.

GEOG277 Gender, Environment and Development/Seminar
See Geography 277.

GEOG280 Urban Ecology: Cities as Ecosystems/Lecture, Discussion
See Geography 280.

GEOG281 Tropical Ecology/Lecture, Discussion
See Geography 281.

GEOG282 Advanced Remote Sensing/Lecture, Laboratory
See Geography 282.

GEOG284 Environment and Development in the Middle East and North Africa/Lecture, Discussion
See Geography 284.

GEOG293 Digital Image Processing/Lecture, Laboratory
See International Development and Social Change 271.

GOVT154 The Politics of Public Policy in the United States/Lecture, Discussion
See Government and International Relations 154.

GOVT157 The Politics of U.S. Environmental Issues/Lecture, Discussion
See Government and International Relations 157.

GOVT213 Policy Analysis/Lecture, Discussion
See Government and International Relations 213.

GOVT216 Comparative Environmental Politics/Lecture, Discussion
See Government and International Relations 216.

GOVT223 Suburban Policy Issues/Seminar
See Government and International Relations 223.

GOVT281 The Politics of Policy Implementation/Seminar
See Government and International Relations 281.

ID190 Raster GIS/Lecture, Laboratory
See International Development and Social Change 190.

ID260 Quantitative Modeling/Lecture Discussion
See International Development and Social Change 260.

ID276 Spatial Database Development
See International Development and Social Change 276.

IDCE30226 Biogeochemical Cycles and Global Change
See Environmental Science 203.

IDCE30276 Environmental Law/Lecture, Discussion
See Government and International Relations 276.

MATH120 Calculus I/Lecture
See Mathematics 120.

MATH121 Calculus II/Lecture
See Mathematics 121.

MGMT252 Corporate Environmental Management
See Management 252.

PHIL232 Case Studies in Environmental Ethics/Seminar
See Philosophy 232.

PHYS110 Introductory Physics – Part I/Lecture, Discussion, Laboratory
See Physics 110.

PHYS111 Introductory Physics – Part II/Lecture, Discussion, Laboratory
See Physics 111.

PSYC105 Quantitative Methods/Lecture, Discussion
See Psychology 105.

SOC205 Sociology of the Environment/Lecture, Discussion
See Sociology 205.

Program Faculty

Marvin D'Lugo, Ph.D. - *Chair*
María Acosta Cruz, Ph.D.
Belén Atienza, Ph.D.
Paul Burke, Ph.D.
Carol D'Lugo, Ph.D.
William Ferguson, Ph.D.
Odile Ferly, Ph.D.
Everett Fox, Ph.D.
Beth Gale, Ph.D.
Constance Montross, Ph.D.
Michael Spingler, Ph.D.
Catherine Quick Spingler, M.A.
Alice Valentine, M.A.

Adjunct Faculty

Marcia Butzel, Ph.D.
Gary Overvold, Ph.D.

Emeriti Faculty

Raymond E. Barbera, Ph.D.
Kenneth Hughes, Ph.D.
Hartmut Kaiser, Ph.D.
Dorothy Kaufman, Ph.D.
Walter Schatzberg, Ph.D.
Michael Spingler, Ph.D. will be on sabbatical, Spring 2008.

Program Overview

The Foreign Languages and Literatures Department is part of the Alice Coonley Higgins School of Humanities. The program investigates how peoples and nations express themselves through language, literature and other cultural phenomena. The interdisciplinary spirit of the program illuminates the relationship between national literatures and other areas of the humanities and social sciences.

The major is offered in French and Spanish. It is also possible, at the department's discretion, to major in more than one language (the combined foreign languages major).

There are majors available in comparative literature and ancient civilization as well. Though based in foreign languages and literatures, these two programs–together with the minor offered by ancient civilization–are described elsewhere in the catalog under their own headings.

Undergraduate Requirements

1. Eight courses above the intermediate level. In French, major credit is given for courses above FREN106; in German, above GERM102; in Spanish, above SPAN127.

   The eight required courses include:
   - An introductory-level course in literature
   - A course in culture criticism
   - For Spanish majors, an advanced grammar and composition course (SPAN237 or the equivalent); for French majors, FREN137
   - The Advanced Topics course (297)
   - At least two courses taken in a Clark-sponsored or Clark-approved study-abroad program (this requirement may be waived in special circumstances.)

   At least four of the eight required courses must be taken in residence at the Worcester campus.
2. Five related courses, at least one of which must be CMLT130 The National Imagination. These five related courses are to be selected with the major adviser. They might be courses in other languages and literatures, or in subjects further afield that enrich the student's understanding of core material. When the major program is concentrated in one language, a reading knowledge of a second language is strongly recommended. Only course grades of C or better may be counted toward the major.

   Requirements for the Combined Foreign Languages Major
   - Five courses in each of two languages, chosen from the list of courses that would count toward a single-language major (GERM103 and above; FREN120 and above; SPAN131 and above)
   - The Advanced Topics course (capstone course, numbered 297) in at least one of the two language areas chosen
   - One course in Comparative Literature, normally the core course (CMLT130) required of all our majors
   - Four related courses, as determined in consultation with the student's major adviser
   - At least two units of study abroad in a culture in which one of the target languages is spoken. Ordinarily, courses taken abroad may be counted toward the five required courses in each language area.

Honors Program

This honors program is for foreign languages and literatures majors only. Majors who have done well in their Advanced Topics course (297) are invited to do an honors project in the senior year. Students wishing to work for honors should: 1) determine a suitable topic, in consultation with the major adviser, 2) find a faculty supervisor in the appropriate area of study (it may or may not be the major adviser) and 3) secure the permission of the department chair. A second faculty reader will participate in the final evaluation of the honors project.

Applicants for honors should ordinarily ask the chair's permission before the end of the junior year. (Extensions of this deadline may be granted in special circumstances.) The honors project supervisor and the student are expected to agree on a work schedule, but in any case a preliminary draft of the project must be completed by the first Monday in April. The final version is due one week before the last day of classes.

An honors project counts as one unit of credit.

Foreign Languages and Literatures Minor

A minor program in foreign languages and literatures is offered in French, German and Spanish.

To qualify, a student must complete six courses in the chosen discipline at a level of difficulty that would count toward a major in that field. Some courses may be replaced by courses outside the field of study but related to it (a course in Latin-American history, for example, might be counted as a related course toward a minor in Spanish). Advanced Topics courses required of majors (FREN297, GERM297 and SPAN297) are not required for the minor, but they may be taken for minor credit with permission of the instructor. Courses taken in study-abroad programs may be counted toward the minor, at the department's discretion. Students must declare their intention of fulfilling a minor by the end of the junior year. Only course grades of C or better may be counted toward the minor.

Courses

CHIN101 Elementary Chinese/Lecture, Discussion
Introduces the Chinese language (standard Mandarin) for students with no background in Chinese. Focus is on all four language skills—speaking, listening, reading and writing—including the writing of Chinese characters. No credit is given for CHIN101 without successful completion of CHIN102. Staff/Offered every year

CMLT130 The National Imagination
This course explores the concept of a national community as constructed and critiqued through literary and cinematic narratives, as well as other cultural texts. Special emphasis is given to the ways in which national languages have been used to promote the sense of cultural continuity and identity for various national communities. Variable content. This is a team-taught course with national focus changing depending upon the participation of particular members of the foreign languages faculty. Staff/Offered every spring

CMLT174 Islands in the Stream: Puerto Rico and the French Antilles
An examination of Hispanic and French cultures in the Caribbean, with a specific focus on Puerto Rico and the French Antilles. The course begins with an analysis of theoretical issues of colonialism, postcolonialism and neocolonialism in the region, and follows with an exploration of specific issues such as assimilation, acculturation and alienation. The course then examines the notions of race, gender, language and nationhood through cultural production within and outside of the islands. Ms. Acosta Cruz and Ms. Ferly/Offered periodically

FREN101 Elementary French/Lecture, Discussion
For students with no background in French or no more than one year of high-school French. Students work on all four language skills—listening, speaking, reading, writing—to develop an active knowledge of French. Students participate in weekly conversation groups with a French teaching assistant and work individually in the language lab. No credit is given for FREN101 without successful completion of FREN102. Ms. Spingler/Offered every year

FREN105 Intermediate French I/Lecture, Discussion
Consolidates basic skills for students who have completed FREN102 or the equivalent. Emphasizes communicative proficiency: the development of oral and written skills, self-expression and cultural insight. There are weekly conversation groups with a French teaching assistant. Prerequisite: FREN102, 103 or equivalent, or permission. Staff/Offered every semester

FREN106 Intermediate French II/Lecture, Discussion
Bridges basic skills courses and advanced courses in language, literature and culture. Emphasizes literary and cultural texts. Develops ability to articulate ideas and to participate in meaningful discussions in French. Grammar review is based on specific needs of the group as revealed by class work and compositions. There are weekly conversation groups with a native French speaker. Prerequisite: FREN105 or equivalent determined by placement exam. Staff/Offered every semester

FREN108 Literature and Art of Revolt in Modern France/First-Year Seminar
This seminar studies the various avant-garde and experimental movements in France from 1890 to 1970 with particular focus upon the relationship between these movements and the artistic, cultural and political life of the early- and mid-20th century. The term "revolt" refers both to an aesthetic and an ideological phenomenon. We examine how a number of playwrights, painters, filmmakers and novelists sought to re-invent theatrical, artistic and literary form in order to challenge conventional modes of representing the world. Movements studied include Cubism, Surrealism, Existentialism and the Theater of the Absurd. We will also view some avant-garde films by Luis Buñuel and Jean Cocteau. Playwrights studied may include Alfred Jarry, Guillaume Apollinaire, Jean Cocteau, Jean-Paul Sartre, Albert Camus, Roger Vitrac, Boris Vian and Eugène Ionesco. Mr. Spingler/Offered periodically

FREN112 Fairy Tales of the World/Lecture, Discussion/First-Year Seminar
Fairy tales are among the oldest and simplest forms of literature. They communicate archetypal patterns of human experiences and societal behavior; they reflect human wisdom of all ages derived from all cultures, and their moral teaching is universal and universally applicable. This course will apply a variety of critical analysis methods to a selection of fairy tales from different countries, with an emphasis on the Brothers Grimm and Perrault. Fulfills the Verbal Expression requirement. You must have been placed at the Verbal Expression level to select this seminar. Ms. Gale/Offered periodically

FREN120 Ways of Writing, Ways of Speaking
This third-year level course increases communicative competence in writing and speaking French. Models taken from French and Francophone texts are used as a basis for critical expression. Students improve verbal skills through class discussion, conversation groups and an oral presentation. Prerequisite: FREN106 or equivalent determined by placement exam. Staff/Offered every year

FREN124 Popular Culture in France
An exploration of the multiple manifestations and transformation of French popular culture, from the 1940s to today, as disseminated in film, magazines, comics and music. Examines aspects of French culture such as youth culture, slang, sports, food and humor, and the way in which various media commonly portray topics such as family, love, foreigners and other social issues. Conducted in French. Ms. Ferly/Offered every year

FREN127 Media Workshop in French
Intensive practice in spoken and written French through the study of print and visual news media. Based on their own exploration of current news in Francophone newspapers and television, students will produce model news stories, radio or television broadcasts. In-class activity involves the preparation, rehearsal and delivery of radio or television news items, and informal conversational "editorial board" meetings where students discuss the merits and interest of particular stories offered by their classmates and decide which items should be developed for inclusion in a particular newspaper issue or broadcast. Students will be expected to research current news in such papers as Le Monde and Liberation (available on the Web) and such newscasts as "le Journal de France 2" (available at Clark through SCOLA). Given in French. Mr. Spingler/Offered periodically

FREN131 Readings in French Literature/Lecture, Discussion
Introduces analysis and understanding of French literary texts and their visions of the world and of the self. Focuses on literary structures and conventions that form the basis of different genres through history. Readings include a wide range of complete texts in fiction, theater and poetry. Prerequisite: FREN120 or permission. Staff/Offered every year

FREN136 Studies in the Evolution of French Culture/ Lecture, Discussion

Traditional French values, myths and social institutions in their relationship to changing cultural and social realities. We study Louis XIV's Gardens of Versailles and Napoleon III's redesigning of Paris as cultural texts that represent dominant political and social ideologies. Prerequisite: FREN120 or permission. Mr. Spingler/Offered periodically

FREN137 Studies in Contemporary French Culture

Questions of cultural identity and cultural differences, with particular attention to France and foreigners, Franco-American (dis)connections and issues of immigration. Prerequisite: FREN120 or permission. Staff/Offered every year

FREN140 Francophone Literature and Film

An interdisciplinary analysis of the Francophone world through literature, social writing and film. Begins with an overview of French-speaking countries and regions in Asia, sub-Saharan Africa, Maghreb, Canada and the Caribbean. The focus continues on West Africa, the Caribbean and Maghreb. Conducted in French. Ms. Ferly/Offered every year

FREN145 Translation Workshop/Lecture, Discussion

Students work on various texts (advertising, journalism, theater, film scripts and fiction) exploring theory, techniques and problems of translation. Emphasizes translation from French into English and stresses lexical and syntactic aspects of comparative style. Students become acquainted with the variety of texts an American professional translator might expect to work on, including film subtitling. Prerequisite: FREN120 or above or permission. Ms. Gale/Offered periodically

FREN160 French Culture Seen Through Film: Jean Renoir/ Lecture Discussion

Analyzes cinematic aesthetic and narrative strategies of the films of Jean Renoir, a leading figure in French cinema. Traces development of his art and focuses particularly on the way two works, "The Grand Illusion" and "The Rules of the Game," explore the historical problem of a continuing presence of prerevolution values and myths within 20th-century French republican culture. Taught in English and French sections. Prerequisite for students receiving French credit: one course above 130 or permission. Mr. Spingler/Offered periodically

FREN165 Theater Workshop in French/Lecture, Discussion

A workshop course using scene study to provide direct experience of the theatrical synthesis within which play, actor and spectator operate. Emphasizes vocal delivery through intensive work on diction, phrasing, rhythm and gesture. Explores various approaches to the play's staging. Typically one playwright is studied and topics of theatrical practice are combined with theoretical issues concerning the social background and artistic conventions of the playwright's period. Playwrights studied may be: Molière, Marivaux, Ionesco, Beckett. Conducted in French. Prerequisite: one French course above 130 or permission. Mr. Spingler/Offered periodically

FREN168 Immigration in France/Lecture, Discussion

Through an examination of novels and film by various immigrant communities, notably the North Africans and the Africans, this course traces the history of immigration in France since the 1950s. A study of the media will detail the economic and social realities of these communities, examine their relationship with their host society, and assess their cultural, social economic and even political impact on contemporary France. Ms. Ferly/Offered every other year

FREN170 The Comic Spirit in French Theater and Film/ Lecture, Discussion

Traces the evolution of comic expression and form from Molière through the 20th century. The course pays special attention to the particular artistic qualities of satire, parody and burlesque. We will also consider the ways in which the French comic tradition both influenced and was transformed by film. Authors studied may include Molière, Marivaux, Beaumarchais, Feydeau, Anouilh. Mr. Spingler/ Offered periodically

FREN211 Spirited Rebellion: Adolescence French Novel and Film/ Lecture, Discussion

A close look at youth and the construction of adult identity in the French novel of the 19th and 20th centuries. Discussion of instruction vs. education, family structures, friendship, love relationships and sexuality, gender roles and society, and the transformation of narrative forms. Authors may include Balzac, Sand, Zola, Rachilde, Colette, Gide and Duras. Taught in French. Prerequisite: FREN131, 136 or above, or permission. Ms. Gale/Offered periodically

FREN215 20th-Century French and Francophone Women Writers/ Lecture, Discussion

Explores the major works of French fiction and theory as they question and illuminate each other in the context of the contemporary French feminist controversy between theories and equality and theories of difference. Readings include Colette, Simone de Beauvoir, Helene Cixous, Marguerite Duras, Luce Irigaray, Monique Wittig, Julia Kristeva. Prerequisite: permission of the instructor. Ms. Gale/Offered periodically

FREN230 Images of Youth

This is an interdisciplinary seminar examining the popular representation of "coming of age" through two media, literature and film, and across two cultures, France and the United States. We will examine youth as a social category, reading French and American literature and film against one another, exploring similarities and differences between the two genres in the creation of a cultural understanding of the place of youth in society. Given in English. Permission only. Ms. Gale/Offered periodically

FREN240 Paris in Arts and Literature/Seminar

Investigates changing urban consciousness of 19th-century France by examining problems of representing the city through urban planning (architecture and urban landscape), and through visual representation of Paris by two painters, Caillebotte and Manet, and the literary representation of Paris by two poets, Baudelaire and Rimbaud. Given in French. Prerequisite: two French courses above 130 or permission. Mr. Spingler/Offered periodically

FREN245 Mysteries of the City/Lecture, Discussion

Study 19th-century France origins of the myth of the city as a place of mystery, enchantment and danger. Starting with Eugène Sue's "Mysteries of Paris," the course traces narrative and poetic representations of the city as instances of the melodramatic imagination. Explore the roots of the modern roman and film noir in such texts as Zola's "Thérèse Raquinè." Authors studied include Eugene Sue, Victor Hugo, Honoré de Balzac, Charles Baudelaire and Emile Zola and some 20th-century cinematic representations of 19th-century Paris. Conducted in French. This seminar may be taken by senior majors to fulfill their capstone requirement. Mr. Spingler/Offered periodically

FREN256 No More Classrooms, No More Books: Education in 20th Century French Novel and Film. Lecture/Discussion

An exploration of literary and cinematic portrayals of youth with a focus on the role of the school and other sources of learning. Topics include gendered identity, social structures and narrative strategies. Authors may include Colette, Alain-Fournier, Gide, Sagan, Ernaux and Duras. Taught in French. Prerequisite: FREN131 and another course at the 130 level or above in French, or by permission. Ms. Gale/ Offered periodically

FREN263 Studies in French Cinema

French cinema has been an especially successful European cinema for over a century. It has defined film as an art form and as a major site of national cultural production. Distinctive films can be found in every historical period, from the earliest "cinema of attractions" to today's auteur films and popular genre movies. Of the major world cinemas, French cinema has also been the most successfully nationalist: the French government has supported the industry, critics and policymakers have campaigned against Hollywood dominance, and filmmakers have been active in local and global politics. The focus of the course varies each time it is given. We may examine a particular filmmaker, movement or arts tradition, a genre or comparison of genres, or a particular theme such as immigration, the representation of history or sexual explicitness in recent films. Taught in English. Prerequisite: SCRN010 or permission. Ms. Butzel/Offered every other year

FREN264 Writing and Identity in the Francophone Caribbean

An examination of the notion of identity in writing from Haiti and the French Caribbean (Guadeloupe, Martinique and French Guyana). The course looks at the society and economy of the Francophone Caribbean, their relationship with France both in cultural and political terms, the main sociocultural challenges these Caribbean societies face today, as well as the literary canon of the region. Conducted in French. Ms. Ferly/Offered every other year

FREN267 French Cinema: The New Wave/Lecture, Discussion

Focuses primarily on the films of Jean-Luc Godard, which profoundly changed the look of contemporary cinema including American films. Also includes films by François Truffaut, Louis Malle, and Claude Chabrol, but primarily explores how Godard's radical transformations of film form reflected the crisis in cultural and political consciousness in France in the 1960s. Taught in English. Prerequisite for French credit: two courses above 130 or permission. Mr. Spingler/Offered periodically

FREN270 The Modern French Theater: Experiments of the Avant-Garde/Lecture, Discussion

Studies the origins and developments of the avant-garde theater of France with particular emphasis on the staging of the plays. Focuses on the theater since 1950, especially works by Ionesco, Beckett, Genet and Arrabal. Explores affinities between these playwrights and Dada and Surrealist movements and studies three precursors: Jarry, Ghelderode and Artaud. Conducted in French. Prerequisite: two courses above 130 or permission. Mr. Spingler/Offered periodically

FREN297 Advanced Topics/Seminar

A required capstone course for senior majors. Open to advanced students with permission of instructor. Modified versions of courses above the 200 level are offered periodically for 297 credit. Ms. Ferly, Ms. Gale, Mr. Spingler/Offered every year

GERM101 Introductory German/Lecture, Discussion

Imparts an active command of German. Combines grammar, oral practice and readings in literary and expository prose. There are weekly conversation groups with a native German speaker and individual laboratory work. No credit is given for GERM101 without successful completion of GERM102. Staff/Offered every year

GERM103 Intermediate German I/Lecture, Discussion

Consolidates basic skills for students who have completed GERM102 or the equivalent. Reviews grammar, reading and discussion of selections from newspapers and magazines. Develops skills in oral and written expression. There are weekly conversation groups with a native German speaker and individual laboratory work. Prerequisite: GERM102 or equivalent. Staff/Offered every year

GERM104 Intermediate German II/Lecture, Discussion

Bridges basic skills courses and advanced courses in language, literature and culture. Reviews grammar and studies literary works on themes of contemporary German culture. Develops the ability to articulate ideas and to participate in discussions in German. There are weekly conversation groups with a native German speaker as well as individual laboratory work. Prerequisite: GERM103 or equivalent. Staff/Offered every year

GERM131 German Culture and Conversation/Lecture, Discussion

This third-year course strengthens speech habits, increases vocabulary and improves written expression. Literary and journalistic texts serve as a basis for discussion of contemporary issues. Weekly written assignments. Prerequisite: GERM104 or equivalent. Staff/Offered every year

GERM150 The New German Cinema/Lecture, Discussion

Studies films by German directors Fassbinder, Herzog, Kluge, Schlondorff, Sanders-Brahms, Von Trotta and Wenders. Examines the cinematique technique and world view unique to each director. Also examines German-American cultural cross currents and social issues. Students study the films, read critical writings, write film critiques and produce a paper on the New German Cinema. No prerequisites. Staff/Offered periodically

GERM297 Advanced Topics Tutorial in German Literature/ Lecture, Discussion

Determined by the needs and interests of individual students. Ordinarily taken by senior German majors as a capstone experience. Other advanced students of German language and literature may be invited to participate in the tutorials as space permits. Staff

GRK101 Introductory Greek I, II/Lecture, Discussion

Introduces the language of classical Greece. Covers the grammar and syntax of the Ancient Greek. Students read Ancient Greek texts including philosophical works such as Plato's "Apology of Socrates and Crito," and selections from Homer, Herodotus and the New Testament. No credit is given for GRK101 without successful completion of GRK102. Mr. Burke/Offered every other year

GRK299 Supervised Reading in Philosophical Greek

A study of selected philosophical texts in Greek. Mr. Pakaluk/Offered every semester

HEBR101 Elementary Hebrew I/Lecture, Discussion

Modern conversational Hebrew. Emphasizes speaking, reading, writing and listening skills. Acquisition of vocabulary and basic grammar. Two class meetings per week, one hour of mandatory drill sessions led by a teaching assistant and individual work in the language laboratory. No credit is given for HEBR101 until successful completion of HEBR102. Staff/Offered every year

HEBR102 Elementary Hebrew II/Lecture
This course is a continuation of HEBR101. Offered also for students who placed at that level during placement exams.

HEBR103 Intermediate Hebrew/Lecture, Discussion
Modern conversational Hebrew. Emphasis on speaking, reading, writing and listening skills. Enrichment and reinforcement of verbal expressions and grammatical structures. Two class meetings per week, one hour of mandatory drill sessions led by a teaching assistant and individual work in the language laboratory. HEBR102 or the equivalent required. Staff/Offered every year

HEBR104 Intermediate-Advanced Hebrew/Lecture, Discussion
Surveys significant Hebrew texts, including literature and newspapers, focusing on the Holocaust through literature. Enrichment of verbal and written expression and grammatical structures. Two class meetings per week, one hour of drill sessions, and individual work in the language laboratory. HEBR103 or equivalent required. Staff/Offered every year

JAPN101 Elementary Japanese/Lecture, Discussion
Introduces the Japanese language, emphasizing speaking, listening, reading and writing skills. No credit is given for JAPN101 without successful completion of JAPN102. Ms. Valentine/Offered every year

JAPN103 Intermediate Japanese/Lecture, Discussion
A continuation of first-year Japanese, emphasizing learning kanji, mastering more complex grammatical forms, and increasing fluency. Prerequisite: JAPN102 or permission. Staff/Offered every year

JAPN105 Advanced Japanese/Lecture, Discussion
Primary emphasis is on building critical vocabulary and understanding Japanese behavior patterns. Prerequisite: permission. Staff/Offered periodically

JAPN180 Japanese Culture and Literature in Translation/ Lecture, Discussion
The focus of the class is on 20th-century Japanese literature as a way of exploring Japanese culture and values. How have writers responded to the dramatic events of the past hundred years? How does literary art both reflect and interpret tradition amidst transformation? What's "Japanese" about the works we'll read, and what seems "universal"? How can these texts shed light on Japan's experience with the west, with modernism, war and defeat, affluence and postmodernism? What do they reveal about Japanese constructions of the self, of the nation? Ms. Valentine/Offered every other year

JAPN190 Japanese Women Writers
Explores Japanese poetry and prose in translation, from the literary tradition of 10th- through 11th-century Japan, through the reawakening of women writers in the early modern period to contemporary writers popular both in Japan and abroad. Emphasis is on the cultural context of author and audience and the changing role of women in Japanese society. Ms. Valentine/Offered every other year

LAT101 Introductory Latin
Introduction to the culture and language of Catullus, Ovid, Horace, et al., through reading, oral and written exercises in grammar and syntax, and historical studies with Roman coins. Students will work in small groups and on a play performed on or around the Ides of March when they will also experience Roman cuisine. No credit is given for LAT101 without successful completion of LAT102. Weekly lab required. Staff/Offered every year

LAT103 Intermediate Latin
Vergil's "Aeneid" reviews the basics of Latin grammar through the close reading of selected passages from Vergil's "Aeneid." Investigation of relevant archeological and artistic material will supplement the Latin text in building a comprehensive picture of the artistic and political culture of Augustan Rome. Mr. Burke/Offered every other year

LAT299 Supervised Reading in Philosophical Latin
A close reading of selected philosophical texts in Latin. Mr. Pakaluk/ Offered every semester

SPAN101 Elementary Spanish I, II/Discussion
For students with no more than one year of the language, this course develops basic skills in speaking, reading and writing Spanish. Meets for three hours per week; regular class assignments are supplemented by individual work in the Language Arts Resource Center (LARC). No credit is given for SPAN101 without successful completion of SPAN102. Ms. Acosta Cruz, Ms. Atienza, Ms. Montross, Staff/Offered every year

SPAN103 Elementary Spanish: Intensive/Lecture, Discussion
An accelerated elementary course, intended for students who have had no more than two years of high-school Spanish. Three hours per week, plus individual work in the Language Arts Resource Center. Staff/Offered every year

SPAN105 Intermediate Spanish I/Lecture, Discussion
An intermediate course intended for students with no more than four years of high-school Spanish. Integrates the essential aspects of Spanish in a structured manner, while at the same time reviewing grammar and enhancing skills in reading, writing and conversation. Also develops awareness and appreciation of Hispanic cultures. Prerequisite: successful completion of SPAN101 and 102, 103 or the equivalent. Discussion session required. Ms. Acosta Cruz, Ms. D'Lugo, Staff/Offered every semester

SPAN106 Intermediate Spanish II/Lecture, Discussion
Normally taken after SPAN105, SPAN106 further strengthens skills in the language through grammar reviews, readings on Hispanic themes and class discussions. Emphasis is on activities in reading, writing, speaking and conversational understanding as a preparation for more advanced work. Prerequisite: successful completion of 105 or the equivalent. Discussion session required. Ms. Acosta Cruz, Ms. Atienza, Ms. Montross, Staff/Offered every semester

SPAN117 Field Work in the Latino Community
Offers an opportunity to work in an agency or project serving the Latino community in Worcester (the bilingual school program, Casa de la Comunidad, Worcester Legal Services, etc.). Advisers supervise the student work. Students keep a journal on the experience in which they examine language, culture and related problems of the bilingual community. Students read works of Latino literature and write short papers in Spanish. Weekly meetings with instructor. Prerequisites: proficiency in Spanish; successful completion of course work in the field or fields related to the specific project area; permission of instructor. Offered for credit, but is not graded. Ms. Montross/Offered every year.

SPAN127 Practice in Oral and Written Spanish/Lecture, Discussion
A transitional course between intermediate Spanish and the upper-level offerings for students with a strong background in Spanish (4-5

years of high school Spanish. Develops fluency and sophistication in spoken and written Spanish. Emphasizes practice in conversation, composition and selected grammar review. Prerequisite: SPAN106 or the equivalent. Ms. Acosta Cruz, Ms. D'Lugo, Staff/Offered every semester

SPAN129 SHOCK OF THE NEW: REVOLUTION IN HISPANIC CULTURE/ FIRST-YEAR SEMINAR

Explores the ways in which the arts (literature, cinema and painting) are both transformative and transformed by major changes in ideology, science and technology, psychology and society at large. Shock and change also happen when cultures contact and collide. Examples of topics covered in this course could be: the birth of cinema, the influence of Marxism in figures like Che Guevara, Fidel Castro and Pablo Neruda, Freud's influence in Dali and the surrealists, Frida Kahlo as a feminist icon, and Africa's influence on Picasso. Different topics and periods will be covered each semester. Taught in English. First-year seminar. No prerequisites; restricted to first-year students. Ms. Atienza/Offered periodically

SPAN131 READINGS IN HISPANIC LITERATURES/LECTURE, DISCUSSION

Introduces modern Hispanic narrative, lyric and dramatic literature. Studies authors of Spain and Latin America and their literary, social, cultural and political context. Readings illuminate such themes as cultural continuity and modernity, notions of norm and deviance in the Hispanic community and national identity. Since course content is variable, students may request permission to take the class twice. Conducted in Spanish. Prerequisite: SPAN127. Required for majors. Ms. Atienza, Ms. Acosta Cruz, Ms. D'Lugo, Mr. D'Lugo/Offered every semester

SPAN133 STUDIES IN HISPANIC CULTURE/LECTURE, DISCUSSION

A third-year course introducing students to the diversity of Hispanic culture through literature, history, the arts, Internet and visual media. Focuses on one or two of the following national cultures: Chile, Cuba, Mexico, Puerto Rico, Spain, Argentina. Conducted in Spanish. Prerequisite: SPAN127. Required for majors. Ms. Acosta Cruz, Ms. Atienza, Ms. D'Lugo, Mr. D'Lugo/Offered periodically

SPAN134 LATINO LITERATURE AND MEDIA ARTS

Explores the variety of expressions of Latino identity as a hybrid formation within U.S. culture. Unlike traditional Spanish-language literature, which is historically formed and rooted within a Hispanic national community, Latino culture generally functions between and around different cultures. It is a culture of migration, assimilation, resistance to the melting pot, as well as a unique expression of a new ethnicity in formation. Features Puerto Rican, Cuban-American, Mexican-American, Dominican-American and other cultural products. Not offered to first-year students. Conducted in English. No required prerequisites. Ms. Acosta Cruz, Mr. D'Lugo/Offered periodically

SPAN140 SPANISH DRAMATIC EXPRESSION: PLAY PRODUCTION/ LECTURE, DISCUSSION

Acquaints students with the rhythms, intonations and gestures typical of contemporary spoken Spanish. Through study and presentation of two or more contemporary dramatic works, students gain practical experience in linguistic and cultural skills. Although some consideration is given to the texts as literature, the course is primarily a workshop in advanced oral Spanish. Prerequisite: SPAN127. Ms. Atienza, Mr. D'Lugo/Offered periodically

SPAN141 SPANISH TRANSLATION WORKSHOP/LECTURE, DISCUSSION

Introduces students to the basic issues involved in translation including considerations of cultural difference, language equivalencies, translation loss and ways to approach the source text. Among the texts translated are fragments of prose fiction, songs, magazine ads, product instructions, editorials and movie dialogue (subtitles). Prerequisite: SPAN131 or permission. Ms. D'Lugo/Offered periodically

SPAN236 WOMEN IN HISPANIC LITERATURE/LECTURE, DISCUSSION

Topics include alienation with women's "culture," identity, family structure, violence against women, and women in the national imagination. Readings are from the Spanish and Latin-American tradition. Conducted in Spanish or English. Ms. Acosta Cruz, Ms. Atienza, Staff/Offered periodically

SPAN237 ADVANCED ORAL AND WRITTEN SPANISH/LECTURE, DISCUSSION

An advanced language course offering a sophisticated review of grammar. Areas covered are: written composition, reading comprehension, vocabulary expansion, bilingual translation and oral skills, such as pronounciation and intonation. Conducted in Spanish. By permission only. Required for majors. Ms. Acosta Cruz/Offered every other year

SPAN239 HISPANIC CARIBBEAN FICTION/LECTURE, DISCUSSION

Examines literature, arts and media from Spanish language countries in the Caribbean Basin. Topics include: Afro-Antillean culture, colonialism and postcolonialism, gender studies, migrant sensibility and national identity. Conducted in Spanish. Ms. Acosta Cruz/Offered periodically

SPAN242 THE LATIN AMERICAN NOVEL/LECTURE, DISCUSSION

Readings and discussions of selected works by contemporary Latin American novelists, emphasizing technical innovations in relation to social and political thematics. Critical, historical and cultural material provides a context for the creative surge reflected in 20th-century narrative practice. Prerequisite: SPAN131. Ms. D'Lugo/Offered periodically

SPAN243 LATIN AMERICAN ESSAY AND THOUGHT/LECTURE, DISCUSSION

A cultural study of Latin American ideas expressed in the essay genre. Looks at Latin American essays from the 19th to 21st centuries. Explores issues of national identity, politics, colonialism and postcolonialism, ethnic minorities, women's status and globalization. Conducted in Spanish. Ms. Acosta Cruz/Offered periodically

SPAN245 HISPANIC AMERICAN SHORT STORY/LECTURE, DISCUSSION

Introduces the tradition and development of short narrative in Hispanic America, from its beginnings in colonial chroniclers through the progressive refinements of theme, local color, style and narrative technique that led to fictions of the 20th-century "boom" and beyond. Readings include works by Rubén Darío, Horacio Quiroga, José Luis Borges, Carlos Fuentes, Julio Cortázar, Juan Rulfo, Rosario Ferré, Luisa Valenzuela. Conducted in Spanish. Prerequisite: SPAN131. Ms. D'Lugo/Offered periodically

SPAN246 STUDIES IN SPANISH CINEMA/LECTURE, DISCUSSION

Surveys principal Spanish films and filmmakers of the past 50 years in the context of political and social change in Spain. Considers formulation of cultural ideology through franquista cinema in the 1940s and rise of opposition cinema 1950-1975, operations of film censorship, rise of regional film cultures in post-Franco Spain, and auteurism and national/international audiences of Spanish cinema. Topics vary each time the course is offered. Conducted in Spanish. Offered in English on an occasional basis. Mr. D'Lugo/Offered periodically

SPAN248 Studies in Latin-American Cinema/Lecture, Discussion
Surveys film cultures, directors and works in Latin America, emphasizing developments in Argentina, Brazil, Cuba and Mexico. Examines politics of representation, cultural nationalism in Latin American cinema, issues of authorship and alternative film practices in Third World cinema. Conducted in Spanish. Offered in English on an occasional basis. Mr. D'Lugo/Offered periodically

SPAN249 Studies in Hispanic Cinema/Lecture
Provides students who have already completed SPAN246 or 248 the opportunity to further explore development of film and film culture in Spain or Spanish America. Topics vary each time the course is offered. Sample topics from Spanish cinema include: Spanish and foreign constructions of national identity; narratives of female empowerment; selected film auteurs (Almodóvar, Borau, Buñuel, Saura). Sample topics from Latin American cinemas include: race, gender and ethnicity in various Latin American cultures; cinema as political intervention; selected film auteurs (Tomás G. Alea in Cuba, Emilio "Indio" Fernández and Arturo Ripstein in Mexico and Maria Luisa Bemberg in Argentina. Mr. D'Lugo/Offered periodically

SPAN259 Eros and Violence: Spanish Drama/Lecture, Discussion
The Spanish Inquisition, the persecution of witches and Jews, the control of female sexuality, the conquest of the Americas . . . in this class we will study the connections among sex, power, religion and violence in the Hispanic world starting in 1492. Topics such as magic, love filters, the archetype of the witch, love sickness, crimes of passion, the myth of Don Juan and others will be analyzed in plays such as "La Celestina," "Fuenteovejuna," "Don Juan," and the "Trickster of Seville." Conducted in Spanish. Prerequisite: SPAN131. Ms. Atienza/Offered periodically

SPAN260 The Age of Cervantes/Lecture, Discussion
Introduces Spanish literature and society in the Golden Age, from the era of Catholic monarchs to the death of Cervantes and beyond. Examines works in a variety of genres, tracing development of Spanish imagination from the flowering of Renaissance humanism through the Counter-Reformation and the birth of the baroque, a profile of brilliance and despair that characterizes Spain in these imperial centuries. Conducted in Spanish. Prerequisite: SPAN131. Ms. Atienza/Offered periodically

SPAN265 Latin American Poetry/Lecture, Discussion
Beginning with colonial times and the poems of Sor Juana, students will read a generous selection of poems from all of Latin America. The course will emphasize the extraordinary flowering of poetic activity in the 20th century. Conducted in Spanish. Prerequisite: SPAN131. Staff/Offered periodically

SPAN296 Advanced Topics/Seminar
Close readings and discussion of representative works by major Hispanic writers. Research project required. A required capstone course for senior majors. Variable topics. Conducted in Spanish. Ms. D'Lugo, Mr. D'Lugo, Ms. Acosta Cruz, Ms. Atienza/Offered every year

SCHOOL OF GEOGRAPHY

Clark's School of Geography is ranked as a Tier 1 undergraduate geography program by "Rugg's Recommendations on the Colleges" (22nd edition, 2005). The undergraduate program provides an academic environment characterized by small class sizes, close interactions with faculty, and opportunities for independent study and research. The School offers two undergraduate majors, geography and global environmental studies, as well as minors in geography and global environmental studies.

The Graduate School of Geography offers a traditional doctoral program, in addition to an accelerated master's degree program for its qualified students, leading to an M.A. in Geographic Information Science. In collaboration with Clark's International Development, Community and Environment Department, the Graduate School of Geography also offers an M.A. in Geographic Information Sciences for Development and Environment.

Established in 1921, the Graduate School of Geography is consistently ranked among the elite geography programs in North America and focuses primarily on doctoral training.

GEOGRAPHY

Program Faculty

B. L. Turner, Ph.D. - *Director*
David Angel, Ph.D.
Yuko Aoyama, Ph.D.
J. Ronald Eastman, Ph.D.
Jody Emel, Ph.D.
Karen Frey, Ph.D.
Susan Hanson, Ph.D.
Douglas Johnson, Ph.D.
Roger Kasperson, Ph.D.
Dominik Kulakowski, Ph.D.
Laurence A. Lewis, Ph.D.
Deborah Martin, Ph.D.
James T. Murphy, Ph.D.
Richard Peet, Ph.D.
Colin Polsky, Ph.D.
R. Gil Pontius, Ph.D.
Samuel Ratick, Ph.D.
Dianne Rocheleau, Ph.D.
John Rogan, Ph.D.

Adjunct Faculty

Jacqueline Geoghegan, Ph.D.

Affiliate Faculty

Robert Kates, Ph.D.

Emeriti Faculty

Martyn Bowden, Ph.D.
Gerald Karaska, Ph.D.
Duane S. Knos, Ph.D.
William A. Koelsch, Ph.D.
Robert Mitchell, Ph.D.
Henry J. Steward, Ph.D.

Staff

Joanne Miller: Managing Editor, *Economic Geography*
Beverly Presley, A.M.L.S.: Map and Geography Librarian

Program Overview

Geography and its links to Clark's newest majors, global environmental studies and environmental science, takes students into the world of integrated science by focusing on the relationships between people and their environments. Students work on problems of sustainable development; the livability of cities and the causes and consequences of urban sprawl; climate change; local consequences of economic globalization; social consequences of climate change; and politics, gender and livelihood chances. Majors also have the opportunity to become experts in GIScience (geographical information science).

Special facilities available to students include the Jeanne X. Kasperson Research Library at the George Perkins Marsh Institute; the Guy H. Burnham Map and Aerial Photograph Library, the Clark Labs for Cartographic Technologies and Geographic Analysis, an earth-science teaching and research laboratory and a computer lab.

The Clark Advantage

Geography majors, global environmental studies (GES) majors and environmental science (ES) majors concentrating in Earth Systems Science (ESS) have the opportunity to work on research projects with faculty members and graduate students in one of the most prestigious graduate programs of geography worldwide. Summer Fellowships are available for qualified students to participate in the Human-Environment Regional Observatory (HERO) program, an intensive summer academic-year research effort focused on environmental change in New England. Eligible majors also have the opportunity to enter the tuition-free, accelerated M.A. in GIScience program. Other accelerated M.A. programs include international development and social change, environmental science and policy, and community development and planning.

Geography, GES, and ESS undergraduates are served by the Clark University Geography Association (CUGA), Gamma Theta Upsilon, an international geographic honors society, and a School of Geography Newsletter that is produced twice a semester.

CUGA is the voice of geography, GES, and ESS majors, with student representation on the undergraduate studies committee and the opportunity to attend departmental meetings. CUGA representatives are able to vote and give their ideas and opinions on various topics that concern undergraduate majors. They also attend field trips and periodically have group gatherings to discuss topics of interest to geography majors, such as research, internships, courses and future jobs.

Gamma Theta Upsilon is an elite international honor society; initiates must have completed a minimum of three geography courses, have a B average in geography, rank in the upper 35% of their class, and have completed at least three semesters or five quarters of college course work. For more information on Gamma Theta Upsilon please see their Web site at: http://www.gtuhonors.org/.

The Geography News is a newsletter produced by the undergraduate program assistant in geography with the help of geography majors. The newsletter typically contains information about course offerings, new professors/staff members, student achievements, academic activities, current events at Clark, geographical news from the field and write-ups on field trips. We like to keep our students informed with the latest geographical information.

Undergraduate Requirements

Students majoring in geography take a minimum of 10 geography courses in accordance with the following guidelines:

1. Four core courses.

Core courses emphasize core geographic concepts and ways of creating knowledge; courses in the core are designed to help build frameworks for understanding the world. Students select one core course from each of the following four broad disciplinary divisions, although majors may substitute GEOG011 The World According to Geography, for one of the required core areas.

- Nature and Society: Analyzes the ways that human societies have used, shaped and constructed nature; impacts of societies, economies, and cultures on ecological systems.

  Core courses in nature-society:
  GEOG010 Environment and Culture (First-Year Seminar)
  GEOG017 Culture, Place and Environment
  GEOG025 Suburban Sprawl under the Microscope
  GEOG090 Native Americans and Natural Resources (First-Year Seminar)
  GEOG105 The Keeping of Animals: Patterns of Use and Abuse
  GEOG126 Living in the Material World: The Political Geography of Resource Development
  GEOG136 Gender and Environment
  GEOG179 Globalization, Environment and Justice
  GEOG180 Earth Transformed by Human Action
  GEOG184 Nomads to Oil Sheikhs: The New Geography of The Middle East

- Globalization, Cities and Development: Examines the ways that space and location shape economic, sociopolitical and cultural life; ways that economic, sociopolitical and cultural factors shape space and location; relationships between these processes and the dynamics of urban life.

  Core courses in globalization, cities and development:
  GEOG016 Introduction to Economic Geography
  GEOG020 American Cities: Changing Spaces, Community Places
  GEOG052 Global Change, Regional Challenges
  GEOG107 Miracles of Asia: Economic Growth in Global Contexts
  GEOG127 Political Economy of Development
  GEOG152 Geography of Globalization (First-Year Seminar)
  IDND066 Global Society

- Earth Sciences. Looks at the effects of land-cover change on natural systems; creation of landscapes by natural processes at a variety of scales; interactions between the various components of the world ecosystem (lithosphere, atmosphere, hydrosphere, ecosphere).

  Core courses in earth sciences:
  GEOG014 Weather, Climate and Landforms
  GEOG104 Earth Systems Science
  GEOG114 Intermediate Geomorphology
  GEOG116 Forest Ecology
  GEOG119 Arctic System Science

- Geographic Information Science. Geographic Information Science is concerned with the acquisition, analysis, and communication of geographic information; principles and techniques important in cartography, remote sensing, geographic information systems, and spatial analysis.

  Core courses in geographic information science:
  GEOG087 Introduction to Environmental Information Systems
  GEOG190 Raster GIS

Each year, several 000- and 100-level courses are designated as core courses in each of these areas. In special cases, a 200-level course may be used to fulfill a core course requirement, subject to the approval of the student's adviser and either the undergraduate adviser or the director of the school.

2. Two skills courses.

All geography majors take GEOG141 Research Methods (offered each year) and one additional course in a skill area appropriate to the student's area of specialization, as detailed in their learning plan (discussed below). The adviser's signature on the learning plan signifies formal approval of this elective skills course.

With the approval of the student's adviser, a comparable skills course in another department can be substituted. Students substituting a skills course from another department will need to take an additional geography course to ensure that a total of 10 geography courses are taken.

Geography skills courses include:
GEOG110 Introduction to Quantitative Methods
GEOG141 Research Methods in Geography
GEOG190 Raster GIS
GEOG206 Vector GIS
GEOG247 Intermediate Quantitative Methods in Geography
GEOG260 Quantitative Modeling
GEOG282 Advanced Remote Sensing

3. Three specialization courses.

Each geography major takes three specialization courses, two of which must be at the 200 level and one of which may be either at the 100 or 200 level. Specialization courses are subject to approval by the student's adviser and must reflect a logical combination of courses as specified in the formal learning plan (see below). Formal approval of the elective specialization course is implied by the adviser's signature on the learning plan.

Specialization courses in geography:

Nature and Society:
GEOG222 Why Global Warming Matters
GEOG226 Who Fears What and Why: Social Theories of Environmental Risks and Hazards
GEOG228 Management of Arid Lands
GEOG232 Landscape Ecology
GEOG234 The Geography of Fire
GEOG239 Country and Culture
GEOG261 Decision Methods for Environmental Management Policy
GEOG284 Environment and Development in the Middle East and North Africa

Globalization, Cities, and Development:
GEOG244 Gender, Work and Space
GEOG254 Urban Transportation: Prospects and Problems
GEOG258 Utopian Visions, Urban Realities: Planning Cities for the 21st Century
GEOG274 Africa's Development in Global Context
GEOG289 Development Policy

Earth Sciences:
GEOG211 African Environments and Geographical Implications

Geographic Information Science:
GEOG206 Vector GIS
GEOG260 Quantitative Modeling
GEOG282 Advanced Remote Sensing
GEOG293 Digital Image Processing

4. Learning Plan and Learning Synopsis.

Each student is required to prepare a formal learning plan upon declaring the major. This plan, which can take the form of the major planning sheet in the program guide, identifies the courses the student intends to take (and in which semesters) in order to complete the major requirements. This plan can and should be regularly updated, with files retained by the major adviser and/or the undergraduate coordinator, as well as by the student. In addition by January 31 of the senior year, students complete a learning synopsis. The synopsis will provide a comprehensive assessment of the Geography major as experienced by the student. Specifically, the synopsis describes and points to evidence of student achievement according to the goals of the major: 1) understanding the purpose and scope of the discipline of geography; 2) articulating relationships of people, culture and society with the biophysical environment, or in relation to concepts of space and place; 3) mastery of appropriate skills; and 4) expertise and understanding of a particular topical focus within geography.

5. A research applications course.

Each geography major is required to take at least one 200-level geography course within which he or she carries out an independent research project involving research design, data collection, analysis and a reporting of results. Taken after GEOG141 Research Methods, this course can also satisfy other requirements for the major (normally the specialization requirement) and thus does not necessarily add to the total number of courses taken. The research applications course may be Directed Research (299) or a research-oriented capstone course.

To fulfill the research applications requirement the student must present his or her research project at a poster session. Typically departmental poster sessions are organized by the School of Geography at the end of each semester, although poster presentations at other appropriate venues (Fall Fest; Academic Spree Day; professional meetings) also are encouraged.

Research applications courses:
GEOG226 Who Fears What and Why: Social Theories of Environmental Risks and Hazards
GEOG228 Management of Arid Lands
GEOG232 Landscape Ecology
GEOG239 Country and Culture
GEOG244 Gender, Work and Space
GEOG254 Urban Transportation: Problems and Prospects

GEOG258 Utopian Visions, Urban Realities: Planning Cities for the 21st Century
GEOG274 Africa's Development in a Global Context
GEOG289 Development Policy

6. A Capstone course.

Capstone courses provide an integrative perspective within an area of specialization. Each year a series of capstone courses is offered. The chosen capstone should have a close logical connection with the student's specialization courses and is subject to the approval of the student's faculty adviser. In special circumstances, a nondesignated course may be substituted as a capstone with approval by the undergraduate adviser or the director of the school.

Capstone courses:

Nature/Society

GEOG226 Who Fears What and Why: Social Theories of Environmental Risks and Hazards
GEOG228 Management of Arid Lands
GEOG232 Landscape Ecology
GEOG239 Country and Culture
GEOG274 Africa's Development in a Global Context
IDND299 HERO Seminar

Geographic Information Systems

GEOG397 Advanced Topics in GIS

Globalization, Cities, and Development

GEOG254 Urban Transportation: Prospects and Problems
GEOG258 Utopian Visions, Urban Realities: Planning Cities for the 21st Century
GEOG289 Development Policy

7. Requirements for the Dual Major in Geography

In accordance with University guidelines, the requirements for a dual major are identical to those of the individual major.

Honors Program

The honors program in geography provides qualified students majoring in geography and global environmental studies an opportunity to conduct a major independent research project on a topic of interest.

Program Requirements

- Complete a two-semester independent honors project (thesis) or counterpart in accepted "selective" program, such as HERO, the final product of which is evaluated by a Honors Committee.
- Present a poster on the honors project at Academic Spree Day.
- Project supervised by a geography faculty member and one additional faculty member; the two members constitute the student's Honors Committee.

Program Candidate Qualifications

- Open to juniors with a minimum GPA of 3.25 overall and 3.5 GPA in the geography major by the end of first semester of the junior year of study, and who demonstrate the appropriate research background to undertake independent geographic research.
- Usually honors participants have taken GEOG141 Research Methods, or its equivalent, before entering the program.

Applying for Honors

- Notification of eligibility and information about the program is forwarded to all junior students before the fall semester of the junior year.
- Applications due to the undergraduate program assistant by Nov. 1.
- Provisional honor program students are notified one week before spring registration and provisional acceptance becomes formal once the GPA standards (above) are verified.
- Honors students register for GEOG297 Directed Research (Honors), or HERO.

Details of the honors program in geography are available in the Undergraduate section of the School of Geography's Web page.

Geography Minor

Students wishing to minor in Geography must complete the following components of the regular program of the major (for a total of seven courses):

Two core courses: Core courses emphasize core geographic concepts and ways of creating knowledge; courses in the core are designed to help build frameworks for understanding the world.

Each year, several 000- and 100-level courses are designated as core courses in each of these areas. In special cases, a 200-level course may be used to fulfill a core course requirement, subject to the approval of the student's adviser and either the undergraduate adviser or the director of the school.

Each of the core courses must be selected from one of the following broad disciplinary divisions:

Nature and Society

Analyzes the ways that human societies have used, shaped and constructed nature; impacts of societies, economies and cultures on ecological systems.

Globalization, Cities and Development

Examines the ways that space and location shape economic, sociopolitical and cultural life; ways that economic, sociopolitical and cultural factors shape space and location; relationships between these processes and the dynamics of urban life.

Earth Sciences

Looks at the effects of land-cover change on natural systems; creation of landscapes by natural processes at a variety of scales; interactions between the various components of the world ecosystem (lithosphere, atmosphere, hydrosphere, ecosphere).

Geographic Information Science

Geographic Information Science is concerned with the acquisition, analysis and communication of geographic information; principles and techniques important in cartography, remote sensing, geographic information systems and spatial analysis.

One skills course: Each student undertaking the geography major is required to take at least one geography skills course appropriate to the student's area of specialization. This course must be approved by the student's adviser.

Three specialization courses: Two specialization courses must be at the 200 level and one may be at the 100 or 200 level. The faculty adviser must approve the specialization courses selected.

One elective geography course: The seventh course in the geography minor is an elective that can be taken at any level.

Accelerated Degree Program

Geography offers an accelerated B.A./Master's degree program to eligible students. For more information, visit www.clarku.edu/accelerate.

Graduate Program

The Graduate School of Geography has awarded more doctorate degrees than any other geography program in the United States. We invite applications for admittance to our program from students interested in pursuing a Ph.D. Students are not accepted for master's studies only, although many choose to earn that degree en route to the doctorate, and the M.A. is also available to those who leave the program early. For information on the Master of Arts in Geographic Information Sciences for Development and Environment, please see the program's Web site at www.clarku.edu/departments/idce/academicsgradGISDE.

Applicants with or without prior training in geography are welcome to apply to the Ph.D. program. This normally takes five years to complete, including writing and defending a dissertation. Depending on their concentrations, students may be required to improve their knowledge of geography, cartography, quantitative methods or research methods. Graduate Record Examination scores (verbal, quantitative and analytical) are required of all American and Canadian students, as well as international students who are in an academic program where English is the first language. TOEFL scores or results of another English proficiency test and the TOEFL test of spoken English (TSE) are required for students from countries in which English is not the first language. The deadline for graduate applications is Dec. 31. All applicants receive careful consideration from a faculty-student admissions committee, which meets early in the spring semester to evaluate candidates. For further information and/or application materials (which may be downloaded), please view our Web site at www.clarku.edu/departments/geography or contact the graduate admissions coordinator in writing or by telephone: (508) 793-7337 or 7336; fax: (508) 793-8881; or e-mail: geography@clarku.edu.

Requirements

Applicants should request a copy of current guidelines and degree requirements from the graduate admission coordinator.

The graduate curriculum provides an opportunity for students to pursue studies across the full array of geography: human geography (space-society), human-environment geography (nature-society), biophysical geography, and the mapping sciences. Students are encouraged to explore faculty and research interests across these geographies in combination with work in complementary fields and disciplines within and outside of Clark.

Requirements include 16 course credits (eight for those entering with an M.A.); satisfactory completion of doctoral examinations; fulfillment of a skills requirement; and completion, acceptance and successful defense of a dissertation. Also required are three years of residence (or two and one-half for those entering with an M.A. in geography). The normal course load is three courses per semester. The usual sequence students follow is: course work, doctoral exam, research proposal, and dissertation research, write up and defense.

In the first year, students normally complete the two required courses, GEOG318 Explanation in Geography and GEOG368 The Development of Western Geographic Thought, and take additional courses to help refine their interests. All first-year students must register for GEOG315 Professional Training for Geographers, a full-year noncredit seminar that examines graduate studies and career needs including grant preparation, teaching skills techniques and job interviewing as well as introducing the faculty of the school to the student body. Students then meet with advisers for evaluation and planning.

In the second year, students are encouraged to fulfill the skills requirement, to prepare for doctoral exams and to begin dissertation proposal formulation. Course work normally includes seminars, directed readings and directed research. A review of the student's progress is held at the end of the year.

Students who have not already completed their doctoral exams and dissertation proposal are expected to do so in the third year of study.

Students must demonstrate, through course work or examination, proficiency in two of the following areas: multivariate statistics, research design/research methods, geographic information systems, foreign language, or other courses approved by the student's faculty adviser and the director of the Graduate School of Geography.

The doctoral exam assesses the competency of a graduate student in one major and two minor fields. Competency is defined as an understanding of the substantive content and range of theoretical approaches within each subfield. Students must be able to critique the alternative research traditions and defend the theoretical frameworks they adopt. They are expected to have in-depth knowledge of the major field, master a survey of the first minor field, and demonstrate detailed knowledge of a single subfield in the second minor.

The doctoral examination is conducted orally. The examination in the major field lasts approximately one-and-a-half hours, and each minor takes about 45 minutes. At the student's discretion, the major and/or first minor may have a written component, which is in addition to the oral examination.

A formal proposal for dissertation work must be completed and approved by a committee of at least four faculty, one of whom is from outside the school. The proposal is approved after a formal defense before the committee.

The process of conducting and writing up the dissertation research involves close interaction between student and committee members. After extensive criticism and rewriting, a draft thesis is defended at a working session of the committee. A final version incorporating changes suggested at the draft stage is submitted for approval by the dissertation committee. At the discretion of the committee, the director and the student, a public presentation and dissertation signing ceremony may be scheduled.

Courses

BIOL373 Seminar in Biogeography/Lecture, Discussion

Understanding how ecosystems function and how they change in response to human activities and normal Earth system fluctuations are important goals of modern biogeographical and ecological research. Beyond having inherent scientific value, such inquiries have become integral to national and international policies and practices of ecosystem management. This graduate-level seminar considers contemporary themes in the field of biogeography with special emphasis on forest ecology. The seminar will examine primary literature dealing with topics such as the application of the knowledge of historic ecosystem conditions to ecosystem restoration and the effects of global climate change on forest ecosystems. Mr. Kulakowski/Offered every year

GEOG010 Environment and Culture/First-Year Seminar

Students are introduced to major works in the humanities and sciences, which have contributed to a current environment consciousness. The interrelation of nature and human culture within the last

200 years in North America is the primary focus of our course. Writers studied include Henry David Thoreau, Charles Darwin, Aldo Leopold, Rachel Carson, Henry Beston, Donald Worster and Annie Dillard. The seminar will offer several field trips and opportunities to "read" landscapes. Fulfills the Historical Perspective. Mr. Johnson/Offered every other year

GEOG011 THE WORLD ACCORDING TO GEOGRAPHY/LECTURE, DISCUSSION
Introduces students to the breadth of the discipline of geography. The course explores the four themes of geography: nature-society interactions; globalization, cities and development; earth system science; and geographic information sciences. The course explores several critical applied geographical research themes, including global warming, economic globalization, sustainable development and regional studies. Fulfills the Global Comparison Perspective. Mr. Polsky, Staff/Offered every year

GEOG014 WEATHER, CLIMATE AND LANDFORMS/LECTURE, LABORATORY
A basic inquiry into principles and components of landforms, weather and climates. Provides the background for evaluating environmental problems, including the role of human activities. Fulfills the Science Perspective. Mr. Lewis/Offered every year

GEOG016 INTRODUCTION TO ECONOMIC GEOGRAPHY/LECTURE, DISCUSSION
An introduction to the study of industrial geography and regional development. Uncovers the hidden spatial logic behind the emergence of manufacturing zones, shopping malls, financial centers and suburban residential zones. Explores how these locational patterns are being affected by globalization. Discussions will focus on the role of technological progress, industrial organization and government policy in shaping the locations of production and services, and how they affect regional growth and decline. Assignments include an in-depth research report on globalization that focuses on one or more aspects of multinational corporation's strategic and locational behavior and its impacts on regional economies. Fulfills the Global Comparison Perspective. Ms. Aoyama, Mr. Murphy/Offered every year

GEOG017 CULTURE, PLACE AND THE ENVIRONMENT/LECTURE
Ecological and historical approach to cultures and cultural change in a global and spatial context. Broad themes and problems of North America are emphasized: adaptation to "natural" environment; culture in prehistory; migration; creation of cultural areas; fire as a cultural artifact; world views of primitive, traditional and industrial culture; cultural landscape; cultural geography of the United States. One weekly discussion section. Fulfills the Global Comparison Perspective. Mr. Johnson/Offered every year

GEOG020 AMERICAN CITIES: CHANGING SPACES, COMMUNITY PLACES/LECTURE, DISCUSSION
This course examines the history and contemporary processes of urbanization, primarily in the North American context, with particular attention to the geography of these processes, which results in the differentiation of space and the creation of distinct places. The course covers a range of topics relevant to cities, including historical development, governance, social patterns, economics, planning, contemporary problems and the linkages among all of these. We examine the geography of urbanization at several scales, ranging from the development of the North American urban system to the experiences of neighborhoods within cities. A core course in Globalization, Cities and Development in the geography major. Fulfills the Historical Perspective. Ms. Martin/Offered every year

GEOG022 WHY GLOBAL WARMING MATTERS/LECTURE, DISCUSSION, FIRST-YEAR SEMINAR
Climate change (global warming) is the single greatest problem facing the planet today. Or is it? In this seminar students will peel away the rhetoric surrounding global climate change, so that they may be able to understand why this issue matters not only to international policy makers but also to individuals and their daily lives. Topics for exploration will focus on the causes and consequences of climate change and justification (and options) for action. The breadth of areas the climate-change issue intersects—including but not limited to politics, economy, ecology, epistemology, ethics—suggests that global warming is a crucial integrating theme for the discipline of geography and, more importantly, the intellectual foundation of a well-rounded student. Fulfills the Values Perspective. First preference for enrollment will be given to students interested in the following Clark majors: geography, global environmental studies, and environmental science and policy. Others will be admitted on a space-available basis. Offered periodically as a first-year seminar and as a lecture course. Mr. Polsky/Offered periodically

GEOG025 SUBURBAN SPRAWL UNDER THE MICROSCOPE/LECTURE, DISCUSSION, FIRST-YEAR SEMINAR
"Suburban sprawl" is perhaps this country's most important source of environmental and social changes. But what exactly is suburban sprawl? Can we agree how to observe it, measure it or even simply define it? Or is sprawl in the eye of the beholder? Whatever its definition, why should we care? In this course students will wrestle with the elusive concept of suburban sprawl in an effort to achieve two overarching goals: (1) to generate first-order explanations of the causes and consequences of sprawl, and (2) to develop meaningful measures of sprawl. To achieve both overarching goals, students will not only engage provocative texts, they will also collect, process, and analyze data for a selected place, so that students can draw concrete conclusions from applying abstract concepts. Students will also be expected to demonstrate excellence on four specific goals: (1) describing the historical evolution of U.S. suburban development; (2) identifying and evaluating the most important themes in scholarly debates about the causes and consequences of suburban development; (3) collecting and processing data relevant to the study of suburban sprawl; and (4) using spreadsheet and Geographic Information Science analysis techniques to characterize the trends in the collected data. There are no prerequisites for this first-year seminar; students do not need to enter the course with a background in suburban development, contemporary environmental problems or data collection/analysis. We will learn by doing. Mr. Polsky/Offered every year

GEOG050 AFRICA TODAY: CHALLENGES AND OPPORTUNITIES/ FIRST-YEAR SEMINAR
Africa is arguably one of the most poorly understood and misrepresented geographic regions of the world despite its growing significance in and influence on world politics and the global economy. This seminar will expose students to Africa's tremendous potential and enlighten them about some of the region's most significant challenges. Through case studies on key issues, we will explore the region's geography and critically examine the causes for and prospective solutions to challenges such as economic and urban development, public health, political conflict, environmental degradation, cultural survival, human rights and gender equality. In doing so, the seminar will confront mainstream stereotypes about African peoples, societies and economies; will help students better understand the obstacles to and

opportunities for development in economically poor countries; and will demonstrate how global economic and political transformations are leading to complex and diverse changes in African communities. Fulfills the Global Comparative Perspective. Mr. Murphy/Offered periodically

GEOG052 Global Change, Regional Challenges

Applies a regional perspective to explore important questions related to our planet and its people including: What are the key challenges facing communities, environments and societies in different regions of the world today? Is the world becoming more culturally homogenous or more fragmented? Why is the global distribution of wealth so uneven and how might poorer regions "catch up" to wealthier regions? How does the physical and human context of a region influence its ability to benefit from globalization? What factors are driving regional conflicts and how might peaceful resolutions be achieved? Focuses on eight regions—Europe, Russia/Central Asia, Middle East, Sub-Saharan Africa, Latin America, East Asia, and South/Southeast Asia. One or two significant issues will be focused on in each region such as gender equality, human rights, environmental sustainability, political change, economic development, public health, and/or human rights. Fulfills the Global Comparative Perspective. Mr. Murphy/Offered every year

GEOG087 Introduction to Environmental Information Systems/ Lecture, Laboratory

An introduction to fundamental concepts of environmental geographic information science, and a comprehensive survey of the technologies and institutions involved in producing and using geographic data. These include the global positioning system, aerial surveys and photogrammetry, topographic mapping, social surveys such as the U.S. Census, and satellite remote sensing. Overall, this class is a combined introductory class to geographic information systems (GIS), cartography and remote sensing. Fulfills the Science Perspective. Mr. Rogan/ Offered every year

GEOG088 Light My Fire: The Burning of America/First-Year Seminar

Wildfire has always been, and will always be a "hot" topic. This course will be one of the first of its kind offered at a university. It will allow students to examine wildfire from a physical, biological and cultural perspective. Specifically, the following issues will be addressed: How have humans evolved with fire? How has fire helped shape human political and cultural development? What is combustion? Why do things burn? Why is Earth called "the fire planet?" What is pyromania? How does landscape influence wildfire burn patterns? How can geographic data be used to study wildfire? Why has U.S. government policy been so erratic with regard to wildfire? How do fires in America compare to fires in other areas? Fulfills the Scientific Perspective. Mr. Rogan/Offered every other year.

GEOG101 Introduction to Environmental Geology/ Lecture, Laboratory

An introduction to the basic principles of physical, historical and environmental geology. Topics covered include the formation of earth and earth materials, plate tectonics, landform evolution, glaciology and the history of life. The relevance of geology for current issues such as geologic resources, water quality and global change is emphasized. Fulfills the Science Perspective. Ms. Frey, Staff/Offered every other year

GEOG102 Understanding the Weather/Lecture, Laboratory

Designed as an introduction to meteorology and the atmosphere focusing on atmospheric phenomena and processes and the physical laws and principles that govern them. The goal of the course is to understand the weather and the range of atmospheric phenomena that can be experienced or observed in the atmosphere on a daily basis. Ms. Frey, Staff/Offered every other year

GEOG103 The Natural Environment of New England/Field Course

Principles of physical geography as observed in New England and Central Massachusetts. This systematic look at the physical and natural environment of the region will have as an integrating theme the way that interactions at a variety of spatial and temporal scales act to sculpt the landscape and affect local ecosystems. Topics will include: the tectonic processes that created the New England land mass hundreds of millions of years ago, rock types and bedrock geology, glaciation and its effects on landscapes and environments, soil types and water resources, forest and land-use history, biodiversity and the problem of alien species, weather and climate, and New England ecosystems in a global context. Ms. Frey, Staff/Offered every other year

GEOG104 Earth Systems Science/Lecture, Labratory

An introduction to the structure and function of the earth system, focusing on the biosphere—that portion of the system sustaining life. Topics covered are the connections among the terrestrial surface, oceans, and atmosphere that create and sustain the climates and biomes of the world and provide the ecosystem services. Fulfills the Science Perspective. Mr. Kulakowski/Offered every year

GEOG105 Keeping of Animals: Patterns of Use and Abuse/ Lecture, Discussion

Animals play a prominent role in human life. They sustain us, entertain us and provide companionship and solace. Pests and predators compete with humans for food, while harmful diseases lurk unseen in animal reservoirs. Images of goodness and evil reflect the ambivalent attitudes and cultural prejudices that govern human responses to animals. This course explores the cultural, historical and ecological interactions between people and animals, and balances utilitarian and ethical perspectives on current patterns of animal use and abuse. Fulfills the Global Comparison Perspective. One weekly discussion section. Mr. Johnson/Offered every other year

GEOG107 Miracles of Asia: Economic Growth in Global Contexts/Lecture, Discussion

Explores the reasons behind the rapid rise of Asian economies and their sudden crises. Discussions include the impacts of rapid industrialization on the standard of living, housing, role of the state, multinational corporations, urban problems and ethnic relations in east, southeast and south Asian countries. Examines the role of Japan and the United States in Asia's industrialization, the impacts of colonialism in socioeconomic-political transformation in the Asia-Pacific region, business-government relations in Newly Industrializing Economies, and the recent phenomenal growth of China and India. Fulfills the Global Comparison Perspective. Ms. Aoyama/Offered every year

GEOG110 Introduction to Quantitative Methods/ Lecture, Laboratory

See International Development and Social Change 110.

GEOG114 Intermediate Geomorphology/Lecture

Examines the processes resulting in landform diversity. Emphasizes fluvial processes and climate/landform relations. Prerequisite: GEOG014 or a geology course, or permission of instructor. Fulfills the science perspective. Mr. Lewis/Offered every other year

GEOG115 INTRODUCTION TO HYDROLOGY AND WATER RESOURCES: A GEOGRAPHICAL VIEW/LECTURE, DISCUSSION

This course provides an overview of the hydrologic cycle and its major components including precipitation, evapotranspiration, soil moisture, surface water runoff and groundwater flow. Students learn about the varying uses to which humans put water, watershed and other water management concepts, systems of water law and conflict management, water economics and the global geography of water resources. Ms. Emel/Offered every other year

GEOG116 FOREST ECOLOGY/LECTURE, DISCUSSION

Understanding how ecosystems function and how they change in response to human activities and normal Earth system fluctuations are important themes in contemporary natural sciences. Beyond having inherent scientific value, such knowledge has become integral to national and international policies and practices of ecosystem management. This course will provide an important foundation in forest ecology by considering the function, structure and composition of forest ecosystems. Specific topics will include forest succession, historical ecology, disturbance ecology, nutrient cycling, and the influence of climate and environmental heterogeneity on forest patterns and dynamics. The successful completion of GEOG104 Earth System Science is a prerequisite for this course. Mr. Kulakowski/Offered every year

GEOG126 LIVING IN THE MATERIAL WORLD: THE POLITICAL GEOGRAPHY OF RESOURCE DEVELOPMENT/LECTURE, DISCUSSION

Focuses on institutions that govern the development, allocation and use of natural resources like water, minerals, trees and animals. Emphasizes approaches used by geographers to study natural resources. Case studies provide an opportunity to examine differences between societies (or economies) and between specific resource issues. Water in the western United States, Israel or India; gold in Ghana, the United States and South Africa; and animal use in India, Great Britain and China are some examples of typical cases. Fulfills the Global Comparison Perspective. Ms. Emel/Offered every other year

GEOG127 POLITICAL ECONOMY OF DEVELOPMENT/LECTURE

Why do some people die from over-consumption and others from poverty and starvation? Development theories try to answer this fundamental question. This course critically examines such theories, including classical, neoclassical and Keynesian economies; modernization theory; Marxist and neo-Marxist theories; postdevelopmentalism; feminism and feminist critiques of development. Fulfills the Global Comparison perspective. Mr. Peet/Offered every year

GEOG132 BEFORE AND AFTER COLUMBUS: ANCIENT MIDDLE AMERICA AND THE IMPACT OF THE CONQUEST/LECTURE

What were the human-environment conditions and dynamics in Middle America (Caribbean, Central America, Mexico) previous and subsequent to 1492? What were some of the global consequences of the European encounter with Middle America? This course approaches these questions from archaeology, history and environmental studies, placing them within cultural ecology perspectives. Mr. Turner/Offered periodically

GEOG136 GENDER AND ENVIRONMENT/LECTURE, DISCUSSION

Explores how gender is reflected in the landscape, in our settlement and land-use patterns, in environmental history, and in our present ecological science and practice from the global to the local level. Combines lectures, readings, discussions, films and local field trips. Reviews feminist and other alternative explanations of the gendered nature of knowledge, access, use and control of space and resources in environments—past, present and possible. Regional focus on New England. Fulfills the Values Perspective. Ms. Rocheleau/Offered every year

GEOG141 RESEARCH METHODS IN GEOGRAPHY/LECTURE, DISCUSSION

Focuses on ways empirical social-science research is conducted. Students study problems, methodological strategies and analytical techniques characteristic of current social and geographical research. Includes defining a research problem, measurement, sampling, research design, analysis and writing the report. Fulfills the Formal Analysis requirement. A required skills course in the geography major. Ms. Martin, Mr. Polsky/Offered every year

GEOG152 GEOGRAPHY OF GLOBALIZATION/FIRST-YEAR SEMINAR

How do we make sense of jobless growth in the United States, software outsourcing in India, sweatshops in China, and Wal-Mart in various parts of the world? As an introductory course for economic geography, in this class we examine spatial logics of the global economy, and analyze geographical variations of globalization. We analyze issues of development, income disparity across regions and nations, emergence of multinational corporations, and impacts of government policy on development to better understand where industries and firms develop, how they emerge, and why they decline. This class covers industrial location theories, theories of regional growth and case studies of various global industries, businesses and entrepreneurship. Each student has an opportunity to write a research project focusing on one globally produced commodity. Fulfills the Global Comparative Perspective. Ms. Aoyama

GEOG179 GLOBALIZATION, ENVIRONMENT AND JUSTICE/LECTURE, DISCUSSION, FIRST-YEAR SEMINAR (IN ALTERNATE YEARS)

Integrates ecology and political economy from local to global scale through case studies. Starts from a view of people in environmental "hot spots," following links to world economy and planetary ecosystems. Explores connections of international environmental and economic policy with everyday realities and possible ecological futures of people from the Amazon rain forest to the streets of Worcester. Offered as a first-year seminar and as a lecture course alternate years. Fulfills the Verbal Expression requirement. Ms. Rocheleau/Offered every other year

GEOG180 THE EARTH TRANSFORMED BY HUMAN ACTION/LECTURE, DISCUSSION

Traces the course of human modification and transformation of the earth since antiquity, but with particular emphasis on the last 300 years. The major causes and consequences of these changes are explored from global climate change to the sustainability of life. Verbal expression and nonverbal expression sections. Mr. Turner/Offered every year

GEOG184 NOMADS TO OIL SHEIKHS: THE NEW GEOGRAPHY OF THE MIDDLE EAST/LECTURE, SEMINAR

An array of landscapes, economies and cultures comprise the Middle Eastern culture realm. Studies modernization and transformation of traditional Islamic and non-Islamic life and livelihood in the Middle Eastern cultural mosaic. Literature and ethnographic studies supplement geographic analysis. Mr. Johnson/Offered every other year

GEOG190 RASTER GIS/LECTURE, LABORATORY

See International Development and Social Change 190.

GEOG197 Native Americans and Natural Resources

In June of 1975, a gunfight between the F.B.I. and the American Indian Movement (A.I.M.) occurred in South Dakota. The shoot-out was due, in part, to the transfer of Indian land to the U.S. government for uranium and coal development. Some of the most extensive reserves of uranium, coal, oil and gas, gold, copper, timber, water, and other resources lie within reservation boundaries and their development has been fiercely contested by many Native Americans. This course deals principally with the efforts of Native Americans to manage resources, to resist land and resource seizures by corporations and federal and state governments, and to repair damage done to ecological systems. We will examine the history of Native Americans; the appropriation of their lands; corporate natural resource development impacts; contested concepts of "development" and "progress"; and new approaches to resource management including salmon restoration, buffalo management and wolf reintroduction. These cases will be complemented with others from those places now called Australia, New Zealand, Canada and Ecuador to gain an understanding of how indigenous peoples deal with and resist resource development efforts on and near their lands. Periodically offered as a first-year seminar as GEOG090. Fulfills the Global Comparative Perspective. Ms. Emel

GEOG200 Land Degradation/Seminar

Resource use often results in degradation of aquatic and terrestrial productivity from a purely environmental perspective. However from the human perspective, land degradation can be positive (creative) or negative (destructive). Agricultural, deforestation, urban and industrial interactions with land degradation problems are examined in both contemporary and historical frameworks. Mr. Lewis, Mr. Johnson/ Offered every other year

GEOG206 Vector GIS/Lecture, Laboratory

See International Development and Social Change 296.

GEOG211 African Environments and Geographical Implications/Lecture, Discussion

Through an examination of the five major environmental conditions found on the continent, a series of topics will be examined. In particular, relationships of the environment to the patterns of political change from precolonial to the present, land degradation and urbanization will be explored. Mr. Lewis/Offered periodically

GEOG218 Seminar in Physical Environment and Development/Seminar

The world today is changing more rapidly than at any time in history. This course reviews the patterns of change in the Third World, examines the role of environment and resource management in development and allows students to develop their own in-depth case studies. Permission of instructor required. Mr. Lewis/Offered every other year

GEOG222 Why Global Warming Matters II/Seminar

Offers students the chance to examine the causes, consequences, responses and political debates associated with anthropogenic climate change (global warming). Prerequisite: GEOG022 or permission of instructor. Mr. Polsky/Offered every other year

GEOG224 Economy and Environment/Lecture, Discussion

Environmental problems are largely the result of economic developments and human settlement patterns. This course involves the examination of different types of economies, various institutional forms and constraints, and cultural features that have environmental implications. Of particular importance are the types of futures that people envision, and the sorts of economic features that must be developed to achieve desirable (or sustainable) futures. Ecological modernization, political and social ecologies, voluntary simplicity, industrial ecology, small entrepreneurial economies, and other discourses/practices will be examined for their economic and environmental implications.
Ms. Emel/Offered every other year

GEOG226 Who Fears What and Why: Social Theories of Environmental Risks and Hazards/Seminar, Lecture, Discussion

Prerequisite: GEOG141 Research Methods in Geography, or equivalent, or permission of instructor. Introduces advanced undergraduate students and graduate students to the social study of environmental risks and hazards, environmental management and policy, and social impact analysis. Students will explore traditional theories and models underlying risk/hazard analysis, the current debates and research frontiers in the field, and some applied risk/hazard issues of societal concern. Course activities will help students develop the knowledge and writing, presenting and critical-reasoning skills necessary for evaluating environmental risks and hazards. Mr. Polsky/Offered every year

GEOG228 Management of Arid Lands/Lecture, Seminar

The world's drylands present special development problems. Prone to degradation, they face the difficult task of providing support to a rapidly growing population. The history, demography, behavioral characteristics, social and livelihood systems, and physical constraints of dryland ecosystems are analyzed. Evaluates management strategies, identifying the obstacles constraining their growth, and assesses the future development potential of drylands. Mr. Johnson/Offered every other year

GEOG232 Landscape Ecology/Lecture, Discussion

Considers the relationships between spatial patterns in landscape structure (physical, biological and cultural) and ecological processes. Role of ecosystem pattern in mass and energy transfers, disturbance regimes, species' persistence, applications of remote sensing and GIS for landscape characterization and modeling are examined.
Mr. Rogan/Offered every year

GEOG234 The Geography of Fire/Lecture, Discussion

Fire has always been, and will always be a "hot" topic. This course will be one of the first of its kind offered at a university to both undergraduate and graduate students. It examines relationships between wildfire from a physical, biological and cultural perspective. Topics include: the chemistry and physics of fire, fire behavior (including the influences of fuel and weather), the ecological effects of fire, the cultural and institutional framework of fire management, and the cultural nature of wildfire in society. Mr. Rogan/Offered every year

GEOG237 Feminism, Nature and Culture/Seminar

The purpose of this course is to expose students to major currents of contemporary social theory that have developed around "nature" and "woman" or nature and gender. We will explore a number of important contemporary topics including: biotechnology and "life," food and identity, the body/science/fashion, human and nonhuman animal relations, and the manner in which conceptualizations of nature and of women (or gender roles) mutually constitute and reinforce one another. Our principal goals are to analyze and critique the normative idea of what is "nature" or what is "natural" as it pertains to gender, environmental processes, other life forms, and human social and economic existence in general. Because feminists have been instrumental in leading much of this analysis and critique, we lean heavily on feminist theories. We will explore these ideas through science fiction, magical realism, cartoons, movies, other fiction, social histories and biographies. By the end of the semester, students should be adept at decoding representations of nature and gender in the popular media as well as in academic scholarship. Students should also have a reasonable understanding of the development of and debates surrounding biotechnology and gender, identity and gender, and ecofeminist thought. Ms. Emel/Offered every other year

GEOG239 Country and Culture/Lecture, Discussion

The landscape can be read. Be it a vast tropical rain forest with an occasional clearing or an intensively cultivated river valley in New England, the rural landscape is the product of an interaction between people (culture) and place (environment). The course traces the evolution of rural landscapes through time and space from early hunter-gatherers to modern suburban encroachment on rural areas. Emphasis is placed on ecological and cultural principles that help to explain the technocultural modification of rural places. Mr. Johnson/Offered every other year

GEOG244 Gender, Work and Space/Seminar

Explores how a geographic understanding of gender, class and ethnicity can help explain the current restructuring of the global economy. Examines how gender, race, class and ethnicity divide the work force and how location and space shape and sustain such divisions from local to global scales. Evaluates competing explanations for why women and minorities hold jobs that differ distinctly from jobs held by other workers. Ms. Hanson/Offered every other year

GEOG247 Intermediate Quantitative Methods in Geography/Lecture, Laboratory

Continues development begun in GEOG110 of computer-based methods in geographical analysis. Focuses on bivariate and multivariate regression, discriminant analysis, factor analysis, log-linear models and analysis of spatial and temporal data. Includes lab work with PCs, spreadsheets and SPSS-X statistical software package. Prerequisite: GEOG110. Meets skill requirement for geography majors and graduate students. Mr. Ratick/Offered every year

GEOG250 Technology and Environmental Assessment/Seminar

A survey of analytic techniques used in evaluating environmental conditions and the impacts of technology. These techniques consist of formal methods such as cost-benefit, risk-benefit, cost effectiveness and decision analysis. They also include methods used to elicit human judgement and behavioral responses in evaluating complex environmental and technical systems. Draws on case studies and teaches students to make both quantitative and qualitative assessments. Mr. Ratick/Offered every year

GEOG254 Urban Transportation: Problems and Prospects/Lecture, Discussion

Without mobility both people and cities would die. How and why have we created cities in which mobility is so difficult? This course examines urban transportation planning and evaluates proposals for solving transportation problems. Includes transportation and land use; energy, equity and environmental issues; managing the automobile; and the politics of urban transportation. Ms. Hanson, Staff/Offered every other year

GEOG255 Qualitative Research Methods, Skills and Applications/Lecture, Discussion

Examines the purpose, scope and procedures of qualitative research, especially as applied to human geography. Readings will draw on a variety of work in the social sciences, especially anthropology, geography, sociology and women's studies. We examine a range of qualitative methods, including interviews, participant and nonparticipant observation, ethnography, action research and discourse analysis. Through case-study readings, we examine how scholars employ these methods in different research contexts, with particular attention to the ethical and practical considerations of doing so. The course will engage theoretical debates relevant to qualitative research by addressing questions such as: How does qualitative research challenge the practice of social "science" and the search for "universal truths"? How do we represent the world or multiple understandings and perspectives of it? What are the implications of using qualitative data for the researcher, the research product and the "researched"? How do we interpret qualitative data and present it to scholarly audiences? Ms. Rocheleau, Ms. Martin/Offered every other year

GEOG256 Global Economic Geographies/Seminar

Explores dynamics of economic interdependence across regions and nations through analyzing the process of globalization. Focuses on the geographic characteristics of global production (multinational corporations, outsourcing), international trade (logistics, retail), financial flows (global cities) and technological innovation (the Internet). Ms. Aoyama/Offered every other year

GEOG257 Internet Geography: Socioeconomic Impacts of Information Technologies/Lecture, Discussion

Examines how the Internet has changed our society, economy, culture and geography. Explores the myths and the realities of the impacts derived from technological changes. Issues for discussions include an examination of "the death of distance," social polarization and the "digital divide" at the national and international scales, as well as the changing practices and modes of everyday social interactions. Explores how consumption and our conceptualization of leisure is changing as a result of the widespread use of the Internet. Ms. Aoyama/Offered every other year

GEOG258 Utopian Visions, Urban Realities: Planning Cities for the 21st Century/Lecture, Discussion

Although utopia literally means "no place" and utopias do not exist in any concrete sense, utopian thinking exerts a powerful hold on our imagination and continues to inspire a lot of approaches to urban policy, design and planning today. This course explores this thinking and will attempt to come to grips with various ideas about what utopias should be, how they have animated our thinking about city form and function, and how they have achieved certain material expressions in the 20th-century urban context. It will also examine the contradictions and unintended consequences of utopian thinking in planning. Amongst other things, the course will grapple with questions of order versus disorder in the city, heterogeneity versus homogeneity, openness versus closure, and individual freedom versus collective necessity. It will draw upon geographical sources as well as a diverse array of other materials. Ms. Martin/Offered every other year

GEOG260 Quantitative Modeling/Lecture Discussion

See International Development and Social Change 260.

GEOG261 Decision Methods for Environmental Management and Policy/Lecture, Discussion

See Environmental Science 261.

GEOG262 Urban Economic Geography/Seminar

The past two decades have been a period of particular vitality in development of theory, new perspectives, and alternative discourse about the city and the contemporary urban experience. This course examines recent developments in urban geography and details a political economy of urbanization in advanced capitalist societies. Staff/Offered every other year

GEOG263 The Climate System and Global Environmental Change/ Lecture, Discussion

An in-depth look at the global ecosystem and the science of global environmental change. We will deal with the lithosphere, atmosphere, hydrosphere and ecosphere; the linkages between these elements of the earth system; biogeochemical cycling and human perturbation of these cycles; human-induced changes in atmospheric chemistry and surface processes; climate variability over geologic time; and projections of future change. The goal of the course is to provide the scientific background that is necessary for understanding problems of global change and addressing issues of impacts and the many related social and policy questions. Staff/Offered every year

GEOG271 Groundwater Hydrology and Management/ Lecture, Discussion

Introduces geological and hydrological factors controlling the occurrence and development of groundwater, and the methods and impacts of groundwater management. Ms. Emel/Offered periodically

GEOG274 Africa's Development in Global Context

Explores, in detail, the economic geographies of sub-Saharan Africa; both their historical development and their contemporary manifestations in commodity chains, business practices, production systems, gender and environmental relations, entrepreneurial and innovative behavior, and rural and urban livelihood strategies. Emphasis is placed on examining how African economies relate to the rest of the world, how globalization is influencing the prospects for growth, autonomy and sustainability in Africa, and how Africans actually produce, innovate, succeed and struggle in their business activities. Confronts stereotypes about "backward" economic practices in Africa and encourages students to view Africans as capable agents of economic change not simply as passive victims of global or historical inequalities. Mr. Murphy/Offered every other year

GEOG277 Gender, Environment and Development/Seminar

Considers gendered identities, affinities, control, responsibility, knowledge, labor and benefits in the definition, use, management and protection of environments. Readings, lectures and discussion focus on the distinct perspectives and concerns of women and men as actors in natural resource use and management, and in local, regional and global ecological transformations linked to economic restructuring. Ms. Rocheleau/Offered every year

GEOG280 Urban Ecology: Cities as Ecosystems/Lecture, Discussion

Explores ecology and the social and physical geography of cities as systems built, inhabited and managed by people. This class of ecosystem is often neglected except in studies of pollution, yet it is home to many of the world's people and to a surprising number of plant and animal species as well. Readings, lectures, discussion and written work combine landscape and systems ecology with physical and urban geography and environmental justice to broaden our understanding of city environments, both present and possible. Ms. Rocheleau/Offered every year

GEOG281 Tropical Ecology/Lecture, Discussion

Examines structure and function of several major tropical ecosystems (rain forests, savannas, wetlands, coastal zones, deserts) from the perspective of systems ecology and resilience, then applies these concepts to analysis of problems in land use. Readings, lectures and discussions focus on energy flows, material cycles, and species diversity and distribution. Explores pattern and process in tropical ecosystems (especially forests and savannas) under conditions of widespread change in species composition, landscape and livelihoods in tropical and subtropical terrestrial environments. Ms. Rocheleau/Offered every other year

GEOG282 Advanced Remote Sensing/Lecture, Laboratory

Application of remote sensor systems in earth science and other disciplines; interpretation of multispectral scanner, RADAR and thermal imagery, classification, postclassification analysis, special transformations, multitemporal data analysis for change detection, the study of spectral characteristics of vegetation, soils, water, minerals and other materials. The specific objectives of the course are to acquaint the student with the physical principles underlying remote sensing systems and the primary remote-sensing data-collection systems; introduce the student to methods of interpreting and analyzing remotely sensed data; provide some insight concerning the applications of remote sensing in various discipline areas; and provide hands-on experience in digital image processing using software packages available in the computer lab. Mr. Rogan/Offered every year

GEOG284 Environment and Development in the Middle East and North Africa/Lecture, Discussion

From Afghanistan to Morocco, farmers, herders and city dwellers have modified their environment in an effort to develop the region's resources. While many of these changes have been destructive, others have produced sustainable agricultural systems. Today, population growth, infrequent zones of high agricultural potential, the constraints imposed by aridity, and limited mineral resources (except for oil) restrict development opportunities. The successes and failures that have followed from the efforts of Middle Eastern governments and societies to cope with these limitations and to control desertification, overgrazing, salinization, deforestation and urban blight constitute the focus of this course. Prerequisite: any geography nature-society core course (e.g., GEOG105, GEOG184) or a course in international development, or by permission of instructor. Mr. Johnson/Offered every other year

GEOG285 Spatial Database Development

See International Development and Social Change 276.

GEOG289 Development Policy/Seminar

A research seminar for students with some background in development studies. After an introduction on policy and policy-making institutions, the seminar critically examines recent tendencies in development policy, particularly by global governance institutions. Mr. Peet/ Offered every year

GEOG293 Digital Image Processing/Lecture, Laboratory

See International Development and Social Change 271.

GEOG300 Advanced Topics in Physical Geography/Seminar

Graduate-level examination of theories and concepts of physical geography. Focuses on research interests of the faculty and students taking the course. Prerequisite: permission of instructor. Mr. Lewis/Offered periodically

GEOG306 Vector GIS/Lecture, Laboratory
See Geography 206.

GEOG311 Introduction to Quantitative Methods/Lecture, Laboratory
See International Development and Social Change 110.

GEOG314 Research Design and Methods/Graduate Seminar
Covers major topics in empirical social science research design, including problem definition, research strategies, sampling, data-collection techniques and proposal writing. Mr. Polsky/Offered every year

GEOG315 Professional Training for Geographers
Examines graduate studies and career needs, including grant preparation, teaching skills/techniques, job interviewing, as well as introducing the faculty of the School to the student body. A noncredit, required course for first-year Ph.D. students in geography. Mr. Johnson/Offered every semester

GEOG318 Explanation in Geography/Seminar
This seminar explores the main types of explanation in geography and other social sciences, including positivist, existentialist, realist, Marxist, feminist and postmodernist approaches. The seminar focuses on tensions between structural and nonstructural explanation and the integration of theory with empirical facts. Meets first-year core course requirement for geography graduate students. Mr. Peet/Offered every year

GEOG330 Human-Environment/Nature-Society Science and Study/Seminar
Examines human-environment science through the subfields of cultural and political ecology, land-change science, and sustainability science. Course varies by interests of participants. Mr.Turner/Offered periodically

GEOG335 Feminist Geography/Seminar
Explores the intersection of feminism and geography. Topics include feminist theory; epistemological questions in feminist geography; space, place and gender; and politics. Ms. Hanson/Offered every other year

GEOG343 Seminar in Human Dimensions of Global Change: Impacts and Societal Responses/Graduate Seminar
This seminar is designed to introduce graduate students to the concepts and methods associated with scholarly research on global change vulnerability. This emerging literature derives from decades of research on human-environment interactions, and presumes that there is a reciprocal relationship between people and their physical environments. In particular, vulnerability is conceived of as a function of exposure to specific stresses, sensitivity to the exposures, and associated adaptive capacities. We will examine each of these dimensions using both theoretical texts and applied case studies. We will also critically evaluate what is new about "vulnerability" research—and what is not so new. Mr. Polsky/Offered periodically

GEOG344 Special Topics in Environment and Development/Seminar
Addresses specific topics relevant to critical and practical studies of environment and development. The course will operate on a seminar format with scope to accommodate reading groups on specific themes within the class. The topics will include, but will not be limited to the following: complexity theory, network theory and models; women's movements and environment and women in environmental movements; environmental dimensions of the World Social Forum and related movements; the commons and common property in local and global forestry; indigenous knowledge, environment and local/global science; international case studies of sustainable development alternatives; regionally focused studies of environment and development in selected regions within Africa, Caribbean, Central and South America. Ms. Rocheleau/Offered every year

GEOG345 Quantitative Revolution: Examination of Benefits and Limitations of Statistical Analysis for Human Geography Research/Graduate Seminar
Students will investigate the consequences of specifying regression models that violate assumptions, and the range of alternative specifications that permit insight into the ways in which both large- and small-scale factors influence and are influenced by social and natural processes. Mr. Polsky/Offered periodically

GEOG349 Advanced Topics in Spatial Analysis/Seminar
Explores spatial statistics and spatial decision models. The spatial statistics part of the course focuses on point, block and global estimation, fitting variogram models, kriging and spatial simulation. The prescriptive modeling part will focus on location/allocation-based decisions models including private- and public-sector facility location problems and land-allocation models. The topics covered are closely linked to the underlying spatial analytic methodologies used in, and often illuminated by examples developed with, Geographic Information Systems (GIS). The spatial statistics module in the IDRISI GIS will be used. The class is run on the "Socratic" method with some high-tech twists. Students are assigned a topic per week to prepare material and lead discussion. Pass/fail. Grading is based on class participation. Mr. Ratick/Offered every year

GEOG351 Seminar in Resource Geography: Theory and Method/Seminar
Examines theories and methods of resource estimation, allocation and management, providing coverage of the scholarly literature of the field. Ms. Emel/Offered every other year

GEOG353 International Political Ecology/Lecture, Discussion
Integrates theory and practice from cultural ecology, political economy and ecological science, from local to global scale, based on readings and papers in social theory (feminist, structuralist, poststructuralist), policy, social/environmental movements, ecological paradigms, environmental management, sustainable development and conservation. Reading, writing and discussion combines theory and case studies ranging from rural, agrarian cases to urban, industrial contexts. There is no prerequisite for geography Ph.D. students. For M.A. students, there is a prerequisite of a prior development theory course such as GEOG388 Development Policy, IDCE354, IDCE360, or permission of the instructor. For purposes of Fall 2007 registration, you may contact Professor Rocheleau by e-mail: drocheleau@clarku.edu. Ms. Rocheleau/Offered every other year

GEOG355 Social Forestry, Agroecology and Development/Seminar
Considers importance of trees and forests, as well as sustainable farming practice, to social and ecological well-being of people, emphasizing interests of rural people in Africa, Asia and Latin America. Examines forest and agricultural resources as a growing focus of political and economic action at local, national and international levels. Concentrates on case-study examples of technical and policy innovations in social forestry and agroforestry. Ms. Rocheleau/Offered periodically

GEOG360 Quantitative Modeling/Lecture Discussion
See International Development and Social Change 260.

GEOG361 Decision Methods for Environmental Management and Policy/Lecture, Discussion
See Environmental Science 261.

GEOG362 Seminar on Globalization
Examines contemporary literature on globalization from various disciplinary perspectives. Both theoretical and empirical literature from economics, geography, sociology, political science and anthropology on various aspects of globalization, including governance, interdependence, labor relations and "networks" will be analyzed. Explores the possibilities of developing a geographic paradigm to better understand the relationship between the global and the local. Ms. Aoyama/Offered every other year

GEOG364 Graduate Seminar in Economic Geography PART I: Origins and Classics/Seminar
Reviews historical debates and classical readings in economic geography. Includes conceptual frameworks and main assumptions of a variety of pertinent theories including industrial location, agglomerations, theory of the firm, institutions, trade, and theory of the state. Ms. Aoyama, Mr. Murphy/Offered every other year

GEOG365 Graduate Seminar in Economic Geography PART II: Fundamentals and Current Debates/Seminar
Reviews contemporary debates in economic geography. Includes conceptual frameworks and main assumptions of a variety of pertinent theories, with an emphasis on contemporary readings of industrial location, agglomerations, theory of the firm, institutions, trade, and theory of the state. Ms. Aoyama, Mr. Murphy/Offered every other year

GEOG368 The Development of Western Geographic Thought/ Seminar, Discussion
Examines principal orientations, themes and debates within emergent professional geography communities in the 19th and 20th centuries and the professional structure of the field in research, educational and applied contexts. Primarily for graduate students entering geography. Mr. Turner/Offered every year

GEOG370 Animal Agriculture/Lecture, Discussion
Animals and humans have a long history of close association, and humans rely on animals for food, fiber, labor and companionship. Animals play an important role in efforts to increase food production and to improve diet quality in support of a growing human population. Examines terrestrial and aquatic animal systems, and the theory and practice of their intensified exploitation. Mr. Johnson/Offered every other year

GEOG373 Seminar in Urban Geography
In this seminar, we will consider fundamental geographical aspects of urban theory. Some years this course is offered as the first installment of a two-sequence course with GEOG374. In that yearlong sequence, we start in the fall with a survey of major theoretical perspectives ranging from neoclassical economics to political economy perspectives. Other years, this course will stand alone. In both, the goal is to understand the ways that scholars have approached the study of cities, and to compare and contrast the epistemological assumptions underlying different approaches to "the urban." We will critically evaluate major theoretical perspectives in light of their contribution to contemporary research: ecological theories, neoclassical theories, institutional theories, political economy approaches, and cultural studies/identity approaches. Ms Martin/Offered every other year

GEOG374 Seminar in Urban Geography, Part II
In this seminar, we will consider fundamental geographical aspects of urban theory as part of a yearlong sequence. Following from GEOG373, we will survey major theoretical perspectives focusing on political economy and postmodern and poststructural perspectives. This course places special emphasis on understanding approaches to "difference," especially class, race/ethnicity and gender. The course goal is to understand the ways that scholars have approached the study of cities, and to compare and contrast the epistemological assumptions underlying different approaches to "the urban." We will critically evaluate major theoretical perspectives in light of their contribution to contemporary research. Ms. Martin/Offered every other year or as GEOG373.

GEOG375 Technology and Sustainability: Perspectives from the Global South/Seminar
Examines the nature of technologies and their relationships to socioeconomic and environmental change in the developing world. Readings and discussions will address and critique theories on technology change, the role of technologies in development, and their real-world implications (good and bad) for developing regions. Theoretical literature will be linked to empirical case studies of agricultural, energy, financing, information-communication, and/or manufacturing technologies in sub-Saharan Africa, Latin America and South/Southeast Asia. The key objective of the course is to deepen and complicate students' understandings of the ways in which technologies are developed, diffused, and absorbed and about how these processes influence communities and economies in the Global South. Mr. Murphy/Offered every other year

GEOG383 Digital Image Processing/Lecture, Laboratory
See International Development and Social Change 271.

GEOG385 Spatial Database Development
See International Development and Social Change 276.

GEOG390 Raster GIS/Lecture, Laboratory
See International Development and Social Change 190.

GEOG397 Advanced Topics in GIS/Lecture, Laboratory
Covers major research and application issues in GIS. Topics include exploratory spatial data analysis, spatial statistics, land-change modeling, change and time-series analysis, error assessment analysis under conditions of uncertainty, and multicriteria and multiobjective decision making. Concepts introduced during lectures are illustrated in class demos using IDRISI, ArcGIS and GeoDa software. Final project is required for the completion of this course. Prerequisite: GEOG390/IDCE310 Raster GIS and GEOG306/IDCE388 Vector GIS, or permission of instructor. Ms. Ogneva-Himmelberger/Offered every year

GLOBAL ENVIRONMENTAL STUDIES

Program Faculty

Jody Emel, Ph.D. - *Coordinator*
David Angel, Ph.D.
J. Ronald Eastman, Ph.D.
Douglas Johnson, Ph.D.
Laurence A. Lewis, Ph.D.
Deborah Martin, Ph.D.
James T. Murphy, Ph.D.
Richard Peet, Ph.D.
Colin Polsky, Ph.D.
R. Gil Pontius, Ph.D.
Samuel Ratick, Ph.D.
Dianne Rocheleau, Ph.D.
John Rogan, Ph.D.
B. L. Turner, Ph.D.

Adjunct Faculty

Kiran Asher, Ph.D.
David Bell, Ed.D.
Halina Brown, Ph.D.
Sarah Buie, M.F.A.
Brian Cook, Ph.D.
Patrick Derr, Ph.D.
Timothy Downs, D.Env.
William Fisher, Ph.D.
Jacqueline Geoghegan, Ph.D.
Robert Goble, Ph.D.
Todd Livdahl, Ph.D.
Bruce London, Ph.D.
Eugenio Marcano, Ph.D.
Paul W. Posner, Ph.D.
Jennie Stephens, Ph.D.

Affiliate Faculty

Roger Kasperson, Ph.D.
Robert Kates, Ph.D.

Emeriti Faculty

Robert Mitchell, Ph.D.

Off-Campus Affiliated Faculty

Scott Jiusto, Ph.D - Worcester Polytechnic Institute, Assistance Professor
Rob Krueger, Ph.D - Worcester Polytechnic Institute, Director of Worcester Community Project Center

Program Overview

Citizens of the world in the 21st century must deal with notoriously difficult environmental questions. How can we stop the planet from heating up and reduce our dependency upon fossil fuels? How can we reverse biodiversity decline? Is biotechnology safe for humans and other species? How can we achieve more economic justice and protect the environment at the same time? Will international institutions and social movements lead the way?

Through an interdisciplinary approach the global environmental studies major provides students with the knowledge and tools to understand the economic, political and cultural causes of environmental transformation, degradation and exploitation. More importantly, the major affords students opportunities, through research, internships and field work, to consider and develop solutions to environmental problems. Students will look at global and local environment issues through the eyes of people whose lives, livelihoods and ways of living are at stake in the process of economic, ecological, cultural and political change. Students will contend with the economic practices, laws and policies, cultural values and social norms that guide use of the environment in multiple locations with different climates, histories, economies and governing regimes. Students will learn the histories, geographies and strategies of major social movements which have fought for environmental protection, cultural survival, biodiversity, food security, common property and equitable distribution of resources.

The international community needs professionals with a breadth of understanding of today's complex reality. Students with an understanding of international political economy, global environmental change, environmental information systems, environmental law and policy, geographic information systems, gender and environment, and social theory will be able to go into media, finance, law, advocacy, government, civil-society organizations or corporations with the knowledge and skills necessary for shaping sustainable livelihoods.

For details regarding the major or minor, students should consult the Guide to the Major/Minor, which is available on our Web site at www.clarku.edu/departments/ges/.

Undergraduate Requirements

The Global Environmental Studies major begins by providing a general introduction into the interdisciplinary field, and offers the opportunity to study a particular dimension in-depth. In addition, there is a skills requirement and a capstone seminar requirement. The total number of requirements is 12 courses—five breadth, four depth, two skills and a capstone.

Breadth Requirement

(Total of five courses) Environmental problems and solutions result from economic systems, governments, international institutions, cultural systems, social movements and ecological systems. Students will thus choose courses from each of these dimensions to build a breadth of knowledge in the field. There is one course required within the state-of-the-earth category and one course required in the natural-science category. Then the student can choose three from the remaining four categories.

Depth Requirement

Students must take a total of four courses in a substantive area, two of which must be at the 200 level. The field of global environmental studies is large, and students should develop expertise in a more narrowly defined substantive area. Examples include "culture and political ecology," "urban-industrial ecology and urban-environmental problems," "environmental risk and hazards," "resource management," "land-change and land-degradation science," and "sustainability science." Students are encouraged to define their areas of substantive expertise through conversations with their advisers and as part of the formal learning plan.

Skills Requirement

(Total of two courses) Skills are particularly important to promoting excellent analysis of environmental problems and their solutions. They are of critical importance in gaining employment after graduation.

Capstone

The capstone is intended to draw together the knowledge and skills gained throughout the course of study for completing the requirements of the major. Each year a series of capstone courses is offered. The chosen capstone should complement the work completed previously by the student and be in accordance with the student's formal learning plan.

Learning Plan and Learning Synopsis

Each student is required to prepare a formal learning plan upon declaring the major. This plan, which can take the form of the major planning sheet in the program guide, identifies the courses the student intends to take (and in which semesters) in order to complete the major requirements. This plan can and should be regularly updated, with files retained by the major adviser and/or the undergraduate coordinator, as well as by the student. In addition, by Jan. 31 of the senior year, students complete a learning synopsis. The synopsis will provide a comprehensive assessment of the global environmental studies major as experienced by the student. Specifically, the synopsis describes and points to evidence of student achievement according to the goals of the major: 1) understanding the diverse sources, and therefore, possible solutions to environmental problems; 2) articulating relationships of people, culture and society with the biophysical environment; 3) defining and describing concepts of sustainability, economic and social justice in a global context 4) identifying specific problem/issue of global environmental significance and discussing comprehensive approach to solutions; and 5) mastery of appropriate skills.

Internships and Study Abroad

Students are strongly encouraged to do internships with local, state, federal and international governments, and social-movement organizations for major credit. Similarly, study abroad provides students the opportunity to witness first-hand the environmental issues that arise in other parts of the world and to be a part of their analysis and solution. To receive credit for study abroad, students must work with faculty advisers or other departmental and affiliate professors.

Requirements for the Dual Major

In accordance with university guidelines, the requirements for a dual major are identical to those of the individual major. Two courses may be double-counted towards both majors. Students may not, at this time, double major in global environmental studies and geography.

Course Layout:

I. Breadth Requirement (Total of five courses)

A. State of the Earth (One course required)

EN171 International Perspectives on Environmental Problems and Policies
GES179 Globalization, Environment and Justice
GES180 The Earth Transformed by Human Action

B. Natural Science (One course required)

BIOL084 Biodiversity
BIOL114 Marine Biology
BIOL122 Ecological Systems
BIOL201 Ecology of Atlantic Shores
BIOL216 Ecology
CHEM080 Introduction to Environmental Chemistry
CHEM142 Environmental Chemistry
EN120 Discovering Environmental Science
GES014 Weather, Climate and Landforms
GES101 Introduction to Environmental Geology
GES102 Understanding the Weather
GES103 The Natural Environment of New England
GES114 Intermediate Geomorphology
GES115 Introduction to Hydrology
GES232 Landscape Ecology
GES263 The Climate System and Global Environmental Change

C. Economics/Political Economy of the Environment (Choose one of the following courses:)

ECON 157 Economics of Natural Resources and Environment
GES126 Living in the Material World: Political Geography of Resource Development
GES127 Political Economy of Development
GES224 Economy and Environment
ID125 Tales from the Far Side: Development and Underdevelopment

D. Government/Institutions (Choose one of the following courses:)

EN171 International Perspectives on Environmental Problems and Policies
EN276 Environmental Law
GOVT157 The Politics of U.S Environmental Issues
GOVT216 Comparative Environmental Politics
ID294 Participation and Environmental Management

E. Civil Society and Social Movements (Choose one of the following courses:)

GES090/197 Native Americans and Natural Resources
GOVT251 U.S Social Movements and Interest Groups
ID131 Local Action/Global Change
ID253 Social Movements, Globalization and the State
ID294 Participation and Environmental Management
SOC265 Social Movements: Quest for Justice

F. Culture and Environment (Choose one of the following courses:)

ARTS162 Exploring of the Natural World: Seeding Artistic Process with Drawing Monotype and Mixed Media
ARTS 204 Sacred Space
GES017 Culture, Place and Environment
GES136 Gender and Environment
GES237 Feminism, Nature and Culture
ID269 Raced Nature, Gendered Developments: The Political Economy of Environmental Conservation
PHIL131 Environmental Ethics
PHIL232 Case Studies in Environmental Ethics

II. Depth Component (Students must take four courses in a substantive area, two of which must be at the 200 level. Examples follow.)

A. Sustainability Science

ECON128 Introduction to Economic Development
EN101 Environment, Society and Technology
EN277 Sustainable Consumption and Production
GES226 Who Fears Environmental Risk and Why: Social Theories of Environmental Risks and Hazards

GES275 Technology and Sustainability: Perspectives from the Global South
ID112 Leading Issues and Sustainable Development

B. Culture and Political Ecology

ECON245 The History of Global Economy
GES 017 Culture, Place and Environment
GES105 Keeping of Animals: Patterns of Use and Abuse
GES136 Gender and Environment
GES179 Globalization, Environment and Justice
SOC205 Sociology of the Environment

C. Urban-Industrial Ecology and Urban Environmental Problems

GEOG025 Suburban Sprawl under the Microscope
GES250 Technology and Environmental Assessment
GES254 Urban Transportation: Problems and Prospects
GES256 Global Economic Geographies
GES280 Urban Ecology: Cities as Ecosystems
MGMT252 Corporate Environmental Management

D. Environmental Risks and Hazards

GEOG025 Suburban Sprawl under the Microscope
GES222 Why Global Warming Matters II
GES226 Who Fears Environmental Risks and Why: Social Theories of Environmental Risks and Hazards
GES247 Quantitative Methods in Geography
GES250 Technology and Environmental Assessment
EN261 Decision Methods for Environmental Management and Policy

E. Resource Management

ECON257 Environmental and Natural Resource Economics
GES105 Keeping of Animals: Patterns of Use and Abuse
GES115 Introduction to Hydrology and Water Resources: A Geographical View
GES126 Living in the Material World: The Political Geography of Resource Development
GES271 Groundwater Hydrology and Management
PHYS140 Energy and the Environment

F. Land-Change and Land-Degradation Science

GES200 Land Degradation
GES211 African Environments and Geographical Implications
GES228 Management of Arid Lands
GES232 Landscape Ecology
GES234 Geography of Fire
ID296 Vector GIS
IDND299 HERO

G. Art and the Environment

ARTS162 Exploring of the Natural World: Seeding Artistic Process with Drawing Monotype and Mixed Media
ARTS 204 Sacred Space
GES017 Culture, Place and Environment
GES237 Feminism, Nature and Culture
PHIL131 Environmental Ethics

H. Energy and the Environment

EN103 Sustainable University
EN207 Climate Change, Energy and Development
EN124 Global Warming: How to Respond?
GES126 Living in the Material World: The Political Geography of Resource Development
GES222 Why Global Warming Matters II

III. Skills (Two required, one related to substantive specialization)

ARTS120 Introduction to Photography
ARTS121 Intermediate Photography
ARTS200 Photography Projects
BIO106 Quantitative Methods in Biology
GES087 Introduction to Environmental Information Systems
GES110 Introduction to Quantitative Methods in Geography
GES141 Research Methods in Geography
GES261 Decision Methods for Environmental Management and Policy
GES226 Who Fears Environmental Risk and Why: Social Theories of Environmental Risks and Hazards
ID190 Raster GIS
ID260 Quantitative Modeling
TA107 Introduction to Video Production
TA119 Public Speaking

IV. Capstone

GES222 Why Global Warming Matters II
GES224 Economy and Environment
GES226 Who Fears Environmental Risk and Why: Social Theories of Environmental Risks and Hazards
GES280 Urban Ecology: Cities as Ecosystems
SOC276 Environment and Inequality
IDND299 HERO

Honors Program

The honors program in geography provides qualified students majoring in geography and global environmental studies an opportunity to conduct a major independent research project on a topic of interest.

Program Requirements

- Complete a two-semester independent honors project (thesis) or counterpart in accepted "selective" program, such as HERO, the final product of which is evaluated by a Honors Committee.
- Present a poster on the honors project at Academic Spree Day.
- Project supervised by a geography faculty member and one additional faculty member; the two members constitute the student's Honors Committee.

Program Candidate Qualifications

- Open to juniors with a minimum GPA of 3.25 overall and 3.5 GPA in the GES major by the end of first semester of the junior year of study, and who demonstrate the appropriate research background to undertake independent geographic research.

Applying for Honors

- Notification of eligibility and information about the program is forwarded to all junior students before the fall semester of the junior year.
- Applications due to the undergraduate program assistant by Nov. 1.
- Provisional honor program students are notified one week before spring registration and provisional acceptance becomes formal once the GPA standards (above) are verified.
- Honors students register for GES297 Directed Research (Honors), or HERO.

Details of the honors program in geography are available in the Undergraduate section of The School of Geography's Web page.

Global Environmental Studies Minor

Students wishing to minor in Global Environmental Studies must complete the following components of the regular program of the major (for a total of eight courses):

1. **Breadth Requirement:** Choose one course in each of the state-of-the-Earth and natural-science areas and choose three courses from the following four areas: economics/political economy, government/institutions, civil society/social movements, and culture and environment.
2. **Depth Requirement:** two courses, one being at the 200-level.
3. **Skills Requirement:** one skills course

Courses

ARTS120 Introduction to Photography/Studio, Lecture, Discussion
See Studio Art 120.

ARTS121 Intermediate Photography/Studio, Lecture, Discussion
See Studio Art 121.

ARTS162 Exploring the Natural World: Seeding Artistic Process with Drawing, Monotype and Mixed Media
See Studio Art 162.

ARTS200 Photography Projects/Studio, Lecture, Discussion
See Studio Art 200.

ARTS204 Sacred Space/Lecture, Discussion, Projects
See Studio Art 204.

BIOL084 Biodiversity/Lecture, Laboratory
See Biology 084.

BIOL106 Quantitative Methods in Biology/Lecture, Laboratory
See Biology 106.

BIOL114 Marine Biology/Lecture, Field Trips
See Biology 114.

BIOL201 Ecology of Atlantic Shores/Lecture, Field Trip
See Biology 201.

BIOL216 Ecology/Lecture, Laboratory
See Biology 216.

CHEM142 Environmental Chemistry/Lecture, Laboratory
See Chemistry 142.

ECON128 Intro to Economic Development/Lecture, Discussion
See Economics 128.

ECON157 The Economics of Natural Resources and the Environment/Lecture
See Economics 157.

ECON245 The History of Global Economy/Lecture, Discussion
See Economics 245.

ECON257 Environmental and Natural Resource Economics
See Economics 257.

EN101 Environment, Society and Technology
See Environmental Science 101.

EN103 The Sustainable University
See Environmental Science 103.

EN124 Global Warming: How to Respond?/First-Year Seminar
See Environmental Science 124.

EN171 International Perspectives on Environmental Problems and Policies/Lecture, Discussion
See Environmental Science 171.

EN206 Climate Change, Energy and Development
See Environmental Science 207.

EN261 Decision Methods for Environmental Management and Policy/Lecture, Discussion
See Environmental Science 261.

EN276 Environmental Law/Lecture, Discussion
See Government and International Relations 276.

EN277 Sustainable Consumption and Production
See Environmental Science 277.

GEOG101 Introduction to Environmental Geology/Lecture, Laboratory
See Geography 101.

GEOG152 Geography of Globalization/First-Year Seminar
See Geography 152.

GEOG200 Land Degradation/Seminar
See Geography 200.

GEOG211 African Environments and Geographical Implications/Lecture, Discussion
See Geography 211.

GEOG222 Why Global Warming Matters II/ Seminar
See Geography 222.

GEOG234 The Geography of Fire/Lecture, Discussion
See Geography 234.

GEOG247 Intermediate Quantitative Methods in Geography/Lecture, Laboratory
See Geography 247.

GEOG250 Technology and Environmental Assessment/Seminar
See Geography 250.

GEOG254 Urban Transportation: Problems and Prospects/Lecture, Discussion
See Geography 254.

GEOG256 Global Economic Geographies/Seminar
See Geography 256.

GEOG263 The Climate System and Global Environmental Change/Lecture, Discussion
See Geography 263.

GEOG271 Groundwater Hydrology and Management/Lecture, Discussion
See Geography 271.

GEOG277 Gender, Environment and Development/Seminar
See Geography 277.

GEOG375 Technology and Sustainability: Perspectives from the Global South/Seminar
See Geography 375.

GES014 Weather, Climate and Landforms/Lecture, Laboratory
See Geography 014.

GES017 Culture, Place and the Environment/Lecture
See Geography 017.

GES025 Suburban Sprawl under the Microscope/Lecture, Discussion, First-Year Seminar
See Geography 025.

GES087 Introduction to Environmental Information Systems/Lecture, Laboratory
See Geography 087.

GES090 Native Americans and Natural Resources
See Geography 197.

GES102 Understanding the Weather/Lecture, Laboratory
See Geography 102.

GES103 The Natural Environment of New England/Field Course
See Geography 103.

GES105 Keeping of Animals: Patterns of Use and Abuse/Lecture, Discussion
See Geography 105.

GES110 Introduction to Quantitative Methods/Lecture, Laboratory
See International Development and Social Change 110.

GES114 Intermediate Geomorphology/Lecture
See Geography 114.

GES115 Introduction to Hydrology and Water Resources: A Geographical View/Lecture, Discussion
See Geography 115.

GES120 Discovering Environmental Science/Lecture, Discussion
See Environmental Science 120.

GES126 Living in the Material World: The Political Geography of Resource Development/Lecture, Discussion
See Geography 126.

GES127 Political Economy of Development/Lecture
See Geography 127.

GES136 Gender and Environment/Lecture, Discussion
See Geography 136.

GES141 Research Methods in Geography/Lecture, Discussion
See Geography 141.

GES157 The Politics of U.S. Environmental Issues/Lecture, Discussion
See Government and International Relations 157.

GES179 Globalization, Environment and Justice/Lecture, Discussion, First-Year Seminar (in alternate years)
See Geography 179.

GES180 The Earth Transformed by Human Action/Lecture, Discussion
See Geography 180.

GES190 Raster GIS/Lecture, Laboratory
See International Development and Social Change 190.

GES224 Economy and Environment/Lecture, Discussion
See Geography 224.

GES226 Who Fears What and Why: Social Theories of Environmental Risks and Hazards/Seminar, Lecture, Discussion
See Geography 226.

GES228 Management of Arid Lands/Lecture, Seminar
See Geography 228.

GES232 Landscape Ecology/Lecture, Discussion
See Geography 232.

GES237 Feminism, Nature and Culture/Seminar
See Geography 237.

GES244 Gender, Work and Space/Seminar
See Geography 244.

GES247 Intermediate Quantitative Methods in Geography/Lecture, Laboratory
See Geography 247.

GES274 Africa's Development in Global Context
See Geography 274.

GES280 Urban Ecology: Cities as Ecosystems/Lecture, Discussion
See Geography 280.

GOVT216 Comparative Environmental Politics/Lecture, Discussion
See Government and International Relations 216.

GOVT251 U.S. Social Movements and Interest Groups/Lecture, Discussion
See Government and International Relations 251.

ID112 Leading Issues in Sustainable Development
See International Development and Social Change 112.

ID125 Tales from the Far Side: Development and Underdevelopment/Lecture, Discussion
See International Development and Social Change 125.

ID131 Local Action, Global Change/Lecture, Discussion
See International Development and Social Change 131.

ID245 Culture, Politics and International Development/Lecture, Discussion
See International Development and Social Change 245.

ID253 Social Movements, Globalization and the State/Lecture, Discussion
See International Development and Social Change 253.

ID260 Quantitative Modeling/Lecture Discussion
See International Development and Social Change 260.

ID269 Raced Nature, Gendered Developments: The Political Economy of Environmental Conservation/Seminar
See International Development and Social Change 269.

ID294 Participation and Environmental Management/Lecture, Discussion
See International Development and Social Change 294.

ID296 Vector GIS/Lecture, Laboratory
See International Development and Social Change 296.

MGMT252 Corporate Environmental Management
See Management 252.

PHIL131 Environmental Ethics/Lecture, Discussion
See Philosophy 131.

PHIL232 Case Studies in Environmental Ethics/Seminar
See Philosophy 232.

PHYS140 Energy and the Environment/Lecture, Discussion
See Physics 140.

SCRN107 Introduction to Video Production
See Screen Studies 107.

SOC205 Sociology of the Environment/Lecture, Discussion
See Sociology 205.

SOC232 Population, Environment and Development/Variable Format
See Sociology 232.

SOC265 Social Movements: Quest for Justice/Variable Format
See Sociology 265.

SOC276 Environment and Inequality
See Sociology 276.

TA119 Public Speaking/Studio
See Theater Arts 119.

GOVERNMENT AND INTERNATIONAL RELATIONS

Program Faculty

Beverly C. Grier, Ph.D. - *Chair*
Robert Boatright, Ph.D.
Michael Butler, Ph.D.
Brian Cook, Ph.D.
Sharon Krefetz, Ph.D.
Mark Miller, Ph.D.
Paul W. Posner, Ph.D.
Srinivasan Sitaraman, Ph.D.
Valerie Sperling, Ph.D.
Kristen Williams, Ph.D.

Adjunct Faculty

Kiran Asher, Ph.D.
Cynthia Enloe, Ph.D.
Douglas Little, Ph.D.
Simon Payaslian, Ph.D.
Robert Ross, Ph.D.

Visiting Faculty

Rebecca Wood, M.A.

Emeriti Faculty

John Blydenburgh, Ph.D.

Program Overview

The Government Department explores some of the most important political questions that face people of all countries. Why are some governments effective and others not? What causes wars or solidifies peace? Can public policies affect relations between women and men, and between different racial groups? Most important, who decides such questions and how? The department offers courses that address these questions and others—in international relations, American politics and comparative politics. The curriculum provides theories and concepts, relevant information and tools for investigation for students to develop their own answers.

Undergraduate Requirements

The major provides a general introduction to the study of politics and an opportunity to explore one particular subfield in greater depth, allowing students to concentrate in one area of politics. The three subfields are: American politics and public policy; comparative politics; and international relations. Students must take 14 courses, with leeway choosing particular courses. Most courses are in the Government Department, but the few from other disciplines complement the study of politics and explore the relationships between government and other sectors of society. The 14 required courses—11 in government, one in economics, one in history and one from related disciplines—are divided into two categories.

General requirements for the government major: seven courses, including one subfield introductory course (in addition to the introductory course in one's chosen subfield); the economics course, ECON010 A Comparative Approach; one government course in normative political theory (GOVT155, 156, 203 or 206); one course in research methods and skills, GOVT107; and three government courses from outside one's chosen subfield.

Subfield specialization requirements: seven courses, including the introductory course to one's chosen government subfield (GOVT050 Introduction to American Government, GOVT070 Introduction to Comparative Politics or GOVT069 Introduction to International Relations); four additional government courses in one's chosen subfield (one of these four must be in the form of a seminar in one's subfield, taken in the junior or senior year); and two courses, related to the subfield, from outside the Government Department. (A list of related courses is available from the department office; one must be in history. The other should be chosen with one's adviser.)

Subfield Descriptions

American Politics

The American Politics and Public Policy subfield includes study of basic political and governmental institutions, major political processes, law and important patterns of political behavior. Subfield specialists become familiar with each of these three broad areas, learning how the political system operates, why public policy emphasizes particular values and allocates certain resources to different groups and individuals, and who benefits and who loses in policy outcomes in policy areas such as housing, the environment and the economy. The federal structure of American government and the diversity of the American population also require familiarity with state politics, urban and suburban politics, law and politics, and women and politics.

Comparative Politics

Comparative politics has two intertwined meanings at Clark: it means immersion in the study of politics in two or more countries outside the United States; and it means deliberately comparing important factors, such as social movements, issues or policy-making processes in two or more countries. Subfield specialists are given the chance to delve into politics experienced by elite and ordinary people inside other countries. While the United States is intentionally kept off center-stage in comparative politics courses, most of them raise specific questions about American politics—its policies, experiences and assumptions—as they are seen from the vantage point of people in countries such as South Africa, Mexico or Russia. The study of comparative politics alerts the specialist to the varieties but also the surprising similarities in how power is gained, and how it is justified and wielded in different countries.

International Relations

Government majors who specialize in international relations address global politics at two intersecting levels: formal state-to-state behavior in terms of diplomacy, war and peace, intervention, law and organization; and translation of global interactions in terms of trade, development, social movements, refugees, human rights, ecology and media. Subfield specialists engage in rigorous theoretical investigations of competing analytic traditions as they attempt to explain ongoing problems of world order. Some of these problems are local, such as boundary disputes; some are regional, such as regional economic integration; and some are global, such as poverty, the greenhouse effect or militarization. Similarly, the actors in world politics are diverse: national governments, subnational governments, international organizations, private interest groups, social classes and religious movements.

General Courses

- GOVT107 Research Methods
- GOVT155 Roots of Political Thought
- GOVT203 Political Theorists and Their Theories/Seminar
- GOVT206 Recent Political Theory
- GOVT260 Democratic Theory/Lecture, Discussion
- GOVT297 Senior Honors Thesis in Government and International Relations
- GOVT298 Internship
- GOVT299 Independent Study

American Politics and Public Policy

- GOVT050 Introduction to American Government
- GOVT091 The Gender Gap and American Politics/First-Year Seminar
- GOVT154 The Politics of Public Policy in the United States
- GOVT157 The Politics of Environmental Issues
- GOVT170 American Political Thought and Behavior
- GOVT171 Urban Politics: People, Power and Conflict in U.S. Cities
- GOVT172 Suburbia: People and Politics
- GOVT175 Women and U.S. Politics
- GOVT204 The American Presidency
- GOVT205 U.S. Campaigns and Elections
- GOVT209 The United States since 1968
- GOVT213 Policy Analysis in the United States
- GOVT215 State and Local Government and Politics
- GOVT221 Urban-Policy Internship Seminar
- GOVT223 Suburban Policy Issues Seminar
- GOVT251 U.S. Social Movements and Interest Groups
- GOVT252 U.S. Political Parties
- GOVT253 U.S. Judicial Politics
- GOVT255 The Politics of U.S. Congress
- GOVT272 U.S. Constitutional Law: Civil Liberties
- GOVT273 U.S. Constitutional Law: Governmental Powers
- GOVT274 The Supreme Court in American Society
- GOVT276 Environmental Law
- GOVT281 The Politics of Policy Implementation/Seminar
- GOVT282 Housing and Community Development/Seminar
- GOVT291 Lawyers and American Politics/Seminar
- GOVT293 Constitutional Democracy/Seminar
- GOVT296 Advanced Topics in American Politics/Seminar

Comparative Politics

- GOVT070 Introduction to Comparative Politics
- GOVT090 Political Science Fiction/First-Year Seminar
- GOVT094 Dictators and Revolutionaries in Latin America/First-Year Seminar
- GOVT103 Africa and the World
- GOVT110 Introduction to Women's Studies
- GOVT117 Revolution and Political Violence
- GOVT125 Tales from the Far Side
- GOVT136 Sub-Saharan Africa: Issues and Problems
- GOVT173 Introduction to Latin American Politics
- GOVT177 Transitions to Democracy
- GOVT178 South Africa: History and Contemporary Politics
- GOVT179 Comparative Foreign Policy
- GOVT186 Upheaval in Eastern Europe
- GOVT208 Comparative Politics of Women
- GOVT210 Violence in the Middle East
- GOVT212 Politics, Culture and Society in Latin America
- GOVT214 Mass Murder and Genocide Under Communism
- GOVT216 Comparative Environmental Politics
- GOVT218 Child Labor and the State: Comparative Perspective/Seminar
- GOVT219 Politics and Development of Southern Africa/Seminar
- GOVT227 Global Politics of Development
- GOVT228 Comparative Politics of Race, Ethnicity and Gender
- GOVT230 Armenian Genocide
- GOVT256 Corruption, Crime and Chaos in Contemporary Russia
- GOVT257 Comparative Courts and Laws
- GOVT275 Gender Politics and Development in Africa/Seminar
- GOVT286 Advanced Topics in Comparative Politics/Seminar
- GOVT290 Inter-American Relations/Seminar
- GOVT293 Constitutional Democracy/Seminar

International Relations

- GOVT069 Introduction to International Relations
- GOVT092 Women and War/First-Year Seminar
- GOVT093 International Human Rights/First-Year Seminar
- GOVT103 Africa and the World
- GOVT146 The U.N. and International Law
- GOVT147 World Order and Globalization
- GOVT179 Comparative Foreign Policy
- GOVT192 Asian Political Economy
- GOVT211 International Cooperation
- GOVT226 International Political Economy
- GOVT238 U.S. Foreign Policy 1914
- GOVT240 Human Rights and International Politics
- GOVT241 History of Human Rights
- GOVT242 Human Rights and Transitional Justice
- GOVT247 Seminar in Global Capitalism
- GOVT250 U.S. National Security
- GOVT268 Peace and War
- GOVT280 Super Power Surrendering? Russia and the World
- GOVT284 The Vietnam War
- GOVT285 Special Topics in Peace Studies/Seminar
- GOVT289 Advanced Topics in International Relations/Seminar

Honors Program

Juniors with strong academic records may apply to the honors program, which expands research and writing skills through an in-depth systematic analysis of one specific topic. Students can achieve honors by successfully completing the honors program, which involves researching, writing and defending a senior thesis. Interested students should obtain guidelines in the department office and must submit applications by March 15 of the junior year.

Government and International Relations Minor

The government minor requires a minimum of six courses within the department. One must be an introductory course (GOVT050, 069 or 070); one must be either in political theory (GOVT155, 203, 206 or 260) or in research methods (GOVT107); and four others can be in any assortment of subfield areas (including two at the 200 level). An internship supervised by a government faculty member, as well as approved political-science courses taken as part of an accredited study-abroad program, may count toward the minor.

Courses

GOVT050 Introduction to American Government/Lecture, Discussion

Introduces the American governmental system. Overviews contemporary structure, operation and performance of national institutions, including the courts. Addresses American political culture, voting and elections, the evolution of federalism, law and politics, and important public issues, such as civil rights, civil liberties and economic change. Mr. Cook, Mr. Miller/Offered every year

GOVT067 Problems of Globalization/Lecture, Discussion

This course will help students to understand and evaluate the challenges of globalization at the beginning of the 21st century. Students will become familiar with the economic, social, political and cultural dimensions of the process. They will be exposed to arguments for and against globalization and possible solutions to problems. The course is the sequel to Global Society (IDND 066), which lays the theoretical foundation. Ms. Grier/Offered every year

GOVT069 Introduction to International Relations/ Lecture, Discussion

Introduces basic concepts of international relations, e.g., the balance of power, and broader alternative perspectives by which security can be viewed. Explores the development of the nation's state system, World War I, World War II, the Cold War, the post-Cold War period and issues such as human rights, environment, gender, war and economics. Ms. Williams, Mr. Sitaraman/Offered every year

GOVT070 Introduction to Comparative Politics/Lecture, Discussion

The study of comparative politics is based upon the premise that we can better understand domestic political dynamics and political phenomena, in general, by comparing political conditions across and within (subnational units) countries. Specifically, comparative politics investigates the following types of questions: In what ways do groups and individuals participate in politics? Why have some countries developed stable democratic political systems, while others remain authoritarian or experience frequent changes in government? What relationship does a country's political organization have with its economic performance, social stability and relations with other countries? In exploring these questions, we will compare both developed and developing countries in terms of political institutions (constitutions, executives, legislatures, courts and political parties), political behavior (voting and collective action), political culture and political economy. Mr. Posner/Offered every year

GOVT080 Model United Nations Program

The Model United Nations program is a realistic simulation of the activities of ambassadors and representatives of different member nations who serve in various agencies of the United Nations. Students assume the role of ambassadors or special U.N. representatives. They participate in live simulations of the U.N. Security Council, Economic Social and Cultural Council, and Special Middle East Summit. Students participate in the Harvard Model U.N. Conference every year. During this conference, Clark students known as delegates enter the world of diplomacy, negotiation and high politics as they grapple with complex realities of peace and security, human rights, women's rights and economic development, and they pit their skills against delegates from other universities representing different countries. Delegates prepare by thoroughly researching policy positions of countries they are representing and contribute to a lively exchange of ideas and simulate an authentic environment that parallels U.N. meetings. This active-learning experience complements classroom learning and prepares Clark students to enter a professional career in government, international organizations or the academe. Repeat registration allowed. Mr. Sitaraman/Offered every year

GOVT090 Political Science Fiction/First-Year Seminar

Science fiction enables us to study the contemporary political world from a distance—to shed light on its problems and its weaknesses, and to be imaginative about alternatives, both hope-filled and deeply disturbing. This course will explore important questions and concepts in the study of politics through various works of science fiction, including novels, short stories and films. Through science fiction, we will consider ideas like power, authority, legitimacy and identity. We will also take up works of science fiction that examine and critique political systems, including democracy and dictatorship. We will read works that explore issues of racism and sexism through utopian and dystopian visions of society, and will consider the meaning and value of equality, as well as other controversial issues. Fulfills the Global Comparative Perspective. Ms. Sperling

GOVT091 The Gender Gap and American Politics/First-Year Seminar

This first-year seminar studies how since the early 1980s, the "gender gap" has received a good deal of attention from the media, politicians and scholars. Differences between women and men in the general public have been found in voter turn-out, candidate and party preferences, as well as attitudes on a number of important domestic and foreign policy issues. On the other hand, women and men, overall, hold remarkably similar opinions on some political issues. A major focus of our course will be on comparing the political attitudes and behavior of women and men and understanding the factors that result in gender differences and similarities in politics, for example, differences in political and gender role socialization, education, employment, etc. We will also consider how different subgroups of men and women compare to each other and to political patterns for their genders. The biggest gender gap in American politics continues to be at the elite level, where men still greatly outnumber women in running for and securing elective political offices. Another major focus of our course will be on explaining the reasons for this difference. We will consider the characteristics, backgrounds and motivations of people – men and women – who run for local, state and national elective offices, and the factors that affect their electoral success or failure, including party support, campaign funding and media coverage. Finally, we will examine whether there are any important differences in the policy preferences, issue priorities, representational styles and impact of female and male elected officials. Fulfills the Global Compatative Perspective. Ms. Krefetz

GOVT092 Women and War/First-Year Seminar

This first-year seminar is part of the International Studies Stream (ISS): "to succceed in contemporary society, students must be familiar with the ways common problems – such as economic growth, immigration, social welfare, environmental regulation – are dealt with differently across the globe. They need to understand the historical, social and political foundations for these differences, and they need to be able to assess their own societies within an international context." That said, this first-year seminar examines the impact of war on women as both victims (i.e. refugees, rape victims) and participants (i.e. warriors) as part of the larger understanding of women's role in society, both domestic and international society. The course will introduce students to the theoretical approaches in international relations for understanding the connection between gender and war. Various case studies of wars will be explored. Questions to be considered include: How do we understand gender, particularly in conflict situations? Does war affect women and men differently? If so, how? How does militarization and conflict perpetuate patriarchal power arrangements? What can the various case studies tell us about women's role in society before, during and after conflict and war? Ms. Williams/Offered periodically

GOVT093 International Human Rights/First-Year Seminar

This first-year seminar examines the evolution and development of international human rights norms and the design of legal instruments, such as the international criminal court and ad-hoc tribunals, to protect and promote human rights across the globe. The course seeks to introduce students to the study of human rights from an international relations perspective with emphasis on international law and organizations. The major focus of the course will be on issues such as slavery, genocide, child rights, women's political empowerment, discrimination, death penalty, economic rights, and civil and political liberties. Overall, emphasis of this course will be on understanding the impact of human-rights norms on interstate relations, how human-rights norms shape the foreign policy of nation-states, and how states respond to international regime pressure. Mr. Sitaraman/Offered periodically

GOVT094 Dictators and Revolutionaries in Latin America/First-Year Seminar

This first-year seminar studies the stereotype of the Latin American military dictator or the leftist revolutionary which has become commonplace in contemporary culture. Whether it is the right-wing autocrat clad in Prussian-style military dress – General Augusto Pinochet of Chile or Alfredo Stroessner of Paraguay, for example, or leftist revolutionaries such as Fidel Castro and Ché Guevarra, bearded and combat ready in military fatigues, these stereotypical images convey to us in shorthand form understandings about Latin American society. They convey or reinforce the image of a militaristic and violent society, politically passionate and ideologically polarized. They convey the image of a society where the use of force trumps the rule of law. As with all stereotypes, there is more than a grain of truth in these characterizations but also much insight or understanding that they foreclose. In particular, such stereotyping begs the question as to why Latin America's modern political history is rife with examples of political violence and extremism emanating from both ends of the political spectrum. This course seeks to enable students to answer this question. More broadly, it seeks to help students to develop their analytical skills and theoretical understandings of reactionary and revolutionary political movements. While the regional focus will be on Latin America, the skills development will be global in its applicability. Ultimately, the skills that students develop in this course should enhance their ability to think critically about contemporary incidents of political violence and inform their actions as concerned citizens. Mr. Posner/Offered periodically

GOVT103 Africa and the World/Lecture, Discussion

Examines the historical and contemporary relationships of sub-Saharan Africa and Europe, the United States, the Middle East and parts of Asia, and Latin America. The course explores issues such as global involvement in Africa's civil wars, genocide in Rwanda, Islamic fundamentalism, the role of the World Bank and International Monetary Fund in Africa's development, and the impact of the HIV/AIDS pandemic. The role of the United Nations and nongovernmental organizations in development, conflict and humanitarian concerns is also explored. Ms. Grier/Offered every other year

GOVT107 Research Methods/Lecture, Discussion

Considers the logic of the research process, from formulating and stating testable hypotheses and operationalizing concepts to collecting and analyzing appropriate data. Explores both concepts and techniques, including statistical analysis. Students design research projects independently or in teams, and analyze data. Mr. Cook, Ms. Krefetz/Offered every semester

GOVT110 Introduction to Women's Studies/Lecture, Discussion

How do societal assumptions and understandings about sex, gender, masculinity and femininity, power and freedom shape our lives? This course explores the system of oppression known as patriarchy, asking what it is, what its effects are, and whether or how it can be altered to create a more just world for men and women alike. We will also consider various intersecting systems of oppression (including racism, classism, homophobia and colonialism, among others) to see how they affect women's lives across the globe. Among the topics covered include: gender and socialization; feminism and feminist theories; women and work; families; politics; reproductive rights; violence against women; and women's movement activism in multiple countries. Ms. Sperling/Offered every four years

GOVT117 Revolution and Political Violence/Lecture, Discussion

Analyzes the concept, the causes and process of revolution. Is revolution inevitable? How does it differ from terrorism, guerrilla warfare or coups? This course examines the Russian and Chinese revolutions as 20th-century prototypes; comparisons are then drawn to more recent revolutions in Eastern Europe, the Middle East, Latin America and South Africa. Ms. Sperling/Offered every year

GOVT125 Tales from the Far Side: Development and Underdevelopment/Lecture, Discussion

See International Development and Social Change 125.

GOVT136 Sub-Saharan Africa: Issues and Problems/Lecture, Discussion

The course explores issues and problems confronting sub-Saharan Africa, including the legacy of colonialism, the establishment of nation-states, military rule, democratization, women's roles, and ethnic and class conflict, civil wars and genocide, the HIV/AIDS crisis, alternative development strategies, the environment, regional conflicts and Africa's role in the global economy. Ms. Grier/Offered every other year

GOVT146 The United Nations and International Law

The objective of this course is to develop a solid understanding of how the United Nations has evolved: What are its organizational structures? Who are the major actors? What are its structures and processes? In conjunction, this course also analyzes the concept and bases of international law. Namely, how international law sets the general procedures and develops institutions for the conduct of international relations. The course also provides needed background for the Model U.N. program. Mr. Sitaraman/Offered every year.

GOVT147 World Order and Globalization/Discussion

Explores the ways in which states have attempted to establish order in an anarchical international system. An overriding challenge to the existing world order, particularly in the post-Cold War period, comes from globalization (economic, political, social issues). Is globalization leading toward a single system of values, or fragmenting into incompatible pockets of pluralist identities? Ms. Williams/Offered every year

GOVT154 The Politics of Public Policy in the United States/Lecture, Discussion

Where do policy ideas originate? How do coalitions form in support or opposition to a policy? Do the dynamics of policy making vary across issues? Focuses on understanding public-policy development and implementation at the national level in the United States, including why some policies fail to develop or why they fail to take effect as intended. Includes assessment of prominent theories of policy development and in-depth analysis of cases. GOVT050 strongly recommended. Mr. Cook/Offered every other year

GOVT155 Roots of Political Thought/Lecture, Discussion

Western political thought from the classic Greek period to early modern liberalism and socialism is analyzed through contributions by major thinkers: Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau and Marx. Mr. Boatright/Offered every year

GOVT157 The Politics of U.S. Environmental Issues/Lecture, Discussion

Why have environmental policies emerged or failed to emerge? What is distinctive about the politics of environmental issues? Primary focus is national environmental politics and policy making in the United States. Examines the character of policy action, public ideas, political leadership and institutional development across several prominent environmental issues. Assignments emphasize class discussion, oral presentations, group simulations and short written analyses. GOVT050 strongly recommended. Mr. Cook/Offered every other year

GOVT170 American Political Thought and Behavior/Lecture, Discussion

Explores factors that have shaped a distinctive American political culture—our shared values, beliefs, attitudes and expectations of government. Considers how this culture is transmitted through the process of political socialization, in which our political orientations and behavioral predispositions are formed. Examines how political culture and socialization are connected to contemporary political attitudes and behavior. Ms. Krefetz/Offered periodically

GOVT171 Urban Politics: People, Power and Conflict in U.S. Cities/Lecture, Discussion

Focuses on the major socioeconomic and political forces that affect city politics in the United States. Topics include: the growth and decline of the cities; fiscal constraints; federal and state urban policies; political machines; reforms; the post-Reform Era; the community power debate; regimes and coalition building; and efforts by African Americans and Latinos to gain political incorporation. Ms. Krefetz/Offered every year

GOVT172 Suburbia: People and Politics/Lecture, Discussion

Focuses on the causes and consequences of the rapid growth of suburbs in the United States after World War II, impact on the nature of metropolitan areas. What are the characteristics of the people who live in suburbs? Is suburban homogeneity a myth or reality? How are suburbs governed? What is suburban political participation like? What are the patterns of policy making on issues such as education, zoning and property taxes? Ms. Krefetz/Offered periodically

GOVT173 Introduction to Latin American Politics/Lecture, Discussion

As an introduction to the study of Latin American politics, this course demands no prerequisites except a basic curiosity about the region and a desire to learn about its development over the past century. In an effort to understand contemporary politics in the region, we consider alternative theoretical explanations for patterns of development as well as analyze the historical role played by influential political actors, including the Church, the military, economic elites, workers and peasants. Some of the fundamental questions we will be asking include: What is the relationship between a country's social and economic conditions and its political system? Why have so many Latin American nations alternated between democratic and authoritarian regimes? What is the relationship between Latin America and the so-called "First World," particularly the United States? In attempts to answer these questions, the course will examine the political systems of Argentina, Brazil, Chile, Mexico and Guatemala. Mr. Posner/Offered every other year

GOVT175 Women and U.S. Politics/Lecture, Discussion

Explores the political attitudes, behavior and status of women in the United States. Views on the nature of women and their "proper" role in society and the state, set forth by classical political philosophers in ancient times, are contrasted with ideas introduced by women's rights theorists, beginning in the 18th century. Focus is on contemporary U.S. politics, including gender differences in political socialization and political participation, the gender gap in voting preferences, women as politicians and bureaucrats, and the influence of women on public policies. Ms. Krefetz/Offered every year

GOVT177 Transitions to Democracy/Lecture, Discussion

How can a dictatorship become a democracy? What challenges face countries emerging from repressive rule? Using firsthand accounts, historical analyses and contemporary films, this course explores the role of grassroots movements, elites and the international context in struggles to create and sustain democracy. The focus will be on transitions from totalitarian and authoritarian regimes in Europe and military dictatorships in Latin America. Mr. Posner, Ms. Sperling/Offered every other year

GOVT178 South Africa: History and Contemporary Politics/Lecture, Discussion

The course acquaints students with the forces that have shaped the politics in contemporary South Africa. It examines colonialism, apartheid, African nationalism and the antiapartheid struggle, the role of African women, politics since the election of Mandela, the impact and politics of the HIV/AIDS crisis, South Africa's economic and political role in the southern Africa region, and Western involvement in the country during apartheid and postapartheid eras. Ms. Grier/Offered every other year

GOVT186 Upheaval in Eastern Europe/Lecture, Discussion

Within a dramatic and short space of time, Eastern Europe was transformed from a homogenized communist bloc to a region brimming with diversity, complexity and unfulfilled potential. The course examines the transformations ranging from Stalinism to pluralism. Why did the revolutions of 1989 occur? What are the difficulties in transition to market economies and democracy? Ms. Sperling/Offered periodically

GOVT190 Leadership in American Politics

This course explores the changing ideas about what constitutes good political leadership in the American governmental system. The approach is developmental, beginning with the framing of the constitution and tracing the evolution of beliefs among both elites and the people at large what personal attributes and governing practices define statesmanship in a liberal democracy. Students will engage in a shared search for major shifts over time in what Americans have broadly accepted as the essential components of proper leadership behavior. The vehicles for this shared exploration will include brief lectures, extensive discussion of assigned readings, guest speakers, and several writing assignments combining research, and analysis, and oral presentation and discussion leading. Mr. Cook/Offered every other year

GOVT192 Political Economy of Asia

This course is an introduction to the political economy of Asia. Primarily the course will focus on the economies of East and Southeast Asia, and to some extent on India. In the past few decades, the Asian economies have grown at a rapid pace and performed exceedingly well relative to the economies of other developing countries. We will rely on comparative-historical analysis, economic history and analytical tools used by economists and political scientists to examine the reasons behind the explosive growth in Asian economies. In addition, we will also analyze the role of the state in promoting economic growth and accelerating Asia's global integration. Mr. Sitaraman/Offered periodically

GOVT201 The HIV/AIDS Crisis in Africa

The course acquaints students with the complex economic, social, political and cultural forces that shape the HIV/AIDS pandemic in sub-Saharan Africa. It explores the reasons for Africa's high prevalence rates, the gendered nature of the pandemic, the impact of HIV/AIDS on children and on development, the responses of African governments, nongovernmental organizations and the larger international community, and the political economy of prevention and treatment, including the politics of global pharmaceutical drug pricing. Ms. Grier/Offered periodically

GOVT203 Political Theorists and their Theories/Seminar

Focuses on one or two people whose theories have influenced ideas about power, governing, liberty, equality and justice. Explores their lives and the societies and events that shaped their ideas. Theorists who have been featured include Hannah Arendt, Alexis de Tocqueville, Erich Fromm and Karl Marx. Staff/Offered periodically

GOVT204 The American Presidency/Lecture, Discussion

Examines the president's changing role in American politics, evolution of the modern presidency, selection and nomination process, relationships with other political institutions and presidential character. Explores proposed reforms for the future. Prerequisite: GOVT050 or permission of instructor. Mr. Cook/Offered every other year

GOVT205 U.S. Campaigns and Elections/Lecture, Discussion

Examines election and campaigns from a number of different perspectives: the theoretical underpinnings of American elections, their historical development, the rules by which campaigns are governed, and the strategies that candidates follow in pursuit of office. Although the focus is almost exclusively on national (presidential and congressional) elections, it is the goal of the course to examine the process of elections from a standpoint that will enable students to understand and analyze the electoral process at various levels of government. The primary system, the role of the media, and the issue of campaign finance, among other topics, are also explored. Mr. Boatright/Offered periodically

GOVT206 Recent Political Theory/Lecture, Discussion

Examines a central normative category of modern democracy from a number of different perspectives: historical development of a distinctly modern public sphere, the liberal and civic republican accounts of the public sphere, and feminist and postmodern critiques. Mr. Boatright/Offered every other year

GOVT208 Comparative Politics of Women/Lecture, Discussion

Explores the roles, priorities, strategies and theories of women in the politics of industrialized and developing countries. Causes for changes or lack of genuine changes in women's political influence are investigated to shed new light on those countries' political systems. Discusses the politics of democratization, sexuality, labor and cross-race alliances. One or more previous courses in government or in women's studies is strongly advised. Staff/Offered every other year

GOVT211 International Cooperation

This course is designed to address the question of how nation-states cooperate under the condition of international anarchy. The course will begin by examining the theoretical problem of international cooperation. Then we will study how states overcome the cooperation dilemma, and how formal and informal institutions reduce uncertainty, risk and facilitate reciprocity and enable international cooperation. Importantly, we are interested in studying how institutions are constituted and established, and how institutions evolve over time; what effects they have on states; and how they influence domestic and international policies of a state. Primarily the course will focus on analyzing competing perspectives on international cooperation, then shift into studying how institutions address the cooperation problematique, and conclude by examining the implications of rapid proliferation of international institutions for nation-states, and international relations theory. Prerequisite: Introduction to International Relations or permission of instructor. Mr. Sitaraman/Offered every other year

GOVT212 Politics, Culture and Society in Latin America/ Lecture, Discussion

Provides an overview of the key economic and political issues confronting Latin America today: economic development and social inequality, international debt, the breakdown of democracies as well as transitions from authoritarian rule, revolutions, and the role of working-class, women's, peasant and ethnic movement. Draws on the analytical perspectives of the political economy and cultural politics to develop a nuanced and self-reflexive understanding of the complex realities of Latin American politics. Ms. Asher, Mr. Posner/Offered periodically

GOVT213 Policy Analysis/Lecture, Discussion

How can society better determine what public problems exist? What policies will respond best to those problems? What impacts have public policies had? These are the questions that animate the policy analysis enterprise, which aims to improve public decision making. Introduces the structure, methods and subject matter of the field, helps students sharpen their analytic skills and explores several important public-policy issues. Students present and discuss concepts and methods and engage in an intense analysis simulation. Prerequisite: GOVT107 or other social-science methods course, or permission of instructor. Limited to juniors and seniors. Mr. Cook/Offered every other year

GOVT214 Mass Murder and Genocide Under Communism/ Lecture, Discussion

Is communism inherently genocidal? Do communism and mass murder necessarily go hand in hand? This course explores the origins, motivations and consequences of the brutal and deadly policies adopted in three very different communist regimes (the Soviet Union, China and Cambodia). We will also consider potential ways to avert mass killing and genocide. Ms. Sperling/Offered every year

GOVT216 Comparative Environmental Politics/Lecture, Discussion

Over the course of the past several decades environmental degradation and sustainability have assumed major significance as public-policy issues, both within nations and internationally. However, given the transnational nature of many environmental problems, addressing such problems has proven to be particularly complex and difficult. This course examines the complex nature of environmental policy from both an international and comparative perspective. We will examine the specific challenges that the international nature of environmental problems poses for policy makers. We will also compare different national experiences and strategies for addressing environmental issues with an eye toward identifying the factors, which impede or facilitate success in promoting effective environmental policy. Mr. Posner/ Offered every other year

GOVT218 Child Labor and Globalization/Seminar

This course raises and attempts to answer a number of questions. Is globalization good or bad for child labor? Or is the record mixed? Taking a comparative perspective, the course looks at different forms of child labor in a number of developing countries, from carpet weaving in Iran, prostitution in the Philippines, and child soldiering in Liberia to factory work in Mexico and to plantation agriculture in Brazil and South Africa. It seeks to determine the impact of global trade, new communications and information technologies, World Bank and International Monetary Fund policies, and the rise of non-state actors on child labor; and explores the role of states in an increasingly globalized political economy. Ms. Grier/Offered periodically

GOVT219 Politics and Development in Southern Africa/Seminar

Explores in a comparative way various issues in the politics and development of the Southern Africa region: race, class, gender, ethnicity, democratization, land reform, labor migration, the HIV/AIDS pandemic, the environment, child labor, the World Bank and the role and effectiveness of the Southern African Development Community. The countries covered include: South Africa, Lesotho, Swaziland, Botswana, Namibia, Zimbabwe and Mozambique. Ms. Grier/Offered every other year

GOVT221 Urban Policy/Seminar and Internship

Focuses on how cities make and implement policies and deliver services, exploring especially downtown redevelopment, neighborhood revitalization and housing policies. Students intern at a Worcester redevelopment, housing or other policy-making organization. Students discuss course readings and share experiences, combining perspectives of scholars and practitioners. GOVT220 or permission of the instructor is required. Limited to 12 students, with preference given to juniors and seniors. Ms. Krefetz/Offered every other year

GOVT223 Suburban Policy Issues/Seminar

Explores politics and policy making in suburban communities, especially zoning and land use, education and property taxes. Students conduct original research in suburbs of Worcester and Boston. Prerequisite: GOVT172 or permission of instructor. Ms. Krefetz/Offered periodically

GOVT226 International Political Economy

Focuses on political determinants of international trade and finance, and to a lesser extent, it is also about the economic determinants of international politics. In this course, we will learn how the international economic system has evolved and examine how we arrived at this pivotal juncture called the "global political economy." We will study how the international political mechanism and historical forces led to the acceptance of certain economic models, theories and ideas. Particularly, the focus will be on actual international economic processes, their inner workings and interlinkages. We will analyze how domestic political alignments influence a country's trade and tariff policies. Why do some countries make decisions that seem to defy conventional economic logic? Why do some countries choose to trade more and why do some countries choose to restrict international trade? More importantly, in this course we will try and unravel the mysteries behind the "international market system." How does it work? And what are its benefits and consequences? Mr. Sitaraman/Offered every other year

GOVT227 Global Politics of Development/Lecture, Discussion

Expands the boundaries of development studies beyond local- or national-level phenomenon, to explore a key dimension of contemporary world politics. Extends the basic historical political economy framework, developed in GOVT145, to deal in greater depth with the ideas, interests and institutions that comprise the international development "regime." Staff/Offered periodically

GOVT230 The Armenian Genocide/Lecture, Discussion

Examines the various dimensions of the Armenian Genocide, through scholarly analyses, survivor narratives, journalistic accounts and other sources. Through the course, students develop a detailed understanding of the actual events of the genocide, its social and political causes, and its immediate and long-term impact on individual Armenians and the Armenian nation, generally. Students will also treat in-depth the initial external response to the genocide, its political and legal aftermath, and the significant effort still made by the Turkish successor state to deny that the genocide occurred. Mr. Payaslian/Offered periodically

GOVT238 U.S. Foreign Policy/Lecture, Discussion

See History 238.

GOVT240 Human Rights and International Politics/Lecture, Discussion

In recent years, questions of human rights and humanitarian concerns have been central to debates on such varied issues as U.S. relations with China, NATO's role in the former Yugoslavia, and the United Nation's place in the international system. The more general question of whether foreign policy should be based strictly on national interests or also include moral considerations has been long-standing, but it is particularly relevant in a post-Cold War world where national interests and priorities are less clear. Appeals to students interested in learning more about current policy disputes and in further exploring the impact of ideas in international politics. Staff/Offered periodically

GOVT241 History of International Human Rights/Lecture, Discussion

See History 241.

GOVT242 Human Rights and Transitional Justice/Lecture, Discussion

See Sociology 242.

GOVT243 EUROPEAN UNION
This course provides a comprehensive overview of the emergence, construction, evolution and future of the most prominent example of "pooled sovereignty" in the international system: the European Union. The course critically examines and evaluates the political, cultural, economic, social and normative factors that have propelled the process of European integration forward. Through course readings as well as lecture and discussion, students will assess the "European project" from both a historical and contemporary standpoint. This assessment requires examination of the implications of constructing a single market, currency, foreign and defense policy, regulatory structure, legal infrastructure, legislature and citizenship from both a European and a wider global perspective. Students should come away from this course with extensive knowledge of the core concepts, actors, approaches and issues involved in the economic and political development of the European polity from its founding in the 1950s through the treaty on European Union and into the 21st century. Mr. Butler/Offered every year

GOVT247 GLOBALIZATION: FASHION AND FOUL PLAY/SEMINAR
See Sociology 288.

GOVT249 THE WESTERN POWERS AND THE ARMENIAN GENOCIDE
See History 247.

GOVT250 U.S. NATIONAL SECURITY/LECTURE, DISCUSSION
Explores domestic and international politics of American national security policy, including the use of force, arms control and diplomacy. Examines the historical background and principal policy-making institutions in security policy particularly the gap between civilians and the military. Case studies focus on the Vietnam War, the Persian Gulf War and Bosnia. Ms. Williams/Offered every year

GOVT251 U.S. SOCIAL MOVEMENTS AND INTEREST GROUPS/ LECTURE, DISCUSSION
Examines the strategies of social movements and interest groups for mobilizing resources and lobbying the state. Considers theoretical frameworks used to study mobilization and action, including the pluralist, power elite and "cycle" theories for interest groups, and collective action, resource mobilization, and political process models of social movements. Mr. Boatright/Offered periodically

GOVT252 U.S. POLITICAL PARTIES/LECTURE, DISCUSSION
Examines historical development of the party system in the United States and the structures and activities of the two major parties. Examines historical successes and failures of various types of third parties and comparative analysis with parties in other advanced democracies. Prerequisite: GOVT050 or permission of instructor.
Mr. Boatright, Mr. Cook/Offered periodically

GOVT253 U.S. JUDICIAL POLITICS/LECTURE, DISCUSSION
Explores the relationships between the courts and other sectors of the American political system. Studies how judges are selected, how courts handle civil and criminal cases, judicial policy making, and how interest groups use the courts. Mr. Miller/Offered every other year

GOVT255 THE POLITICS OF U.S. CONGRESS/LECTURE, DISCUSSION
Examines contemporary politics of the U.S. Congress from individual and institutional perspectives. Includes Congressional elections, differing views of representation, House-Senate differences, Congressional policy making, relationships between Congress and the courts, the presidency, the bureaucracy and interest groups, and the future of the institution. GOVT050 is highly recommended. Mr. Miller/Offered every other year

GOVT256 RUSSIAN POLITICS
Explores Russia's current challenges, including the difficulty of changing a communist party-run dictatorship into a democracy, transforming a socialist economy into a capitalist one and handling the rise of nationalism and separatism within its own borders. Coverage of the Soviet Union, from its creation in 1917 to its collapse in 1991, is included. Ms. Sperling/Offered every other year

GOVT257 COMPARATIVE COURTS AND LAW/LECTURE, DISCUSSION
Examines the court systems, legal systems and role of the legal profession in various North American and Western European countries, including Canada, the United States, the United Kingdom, France, Luxembourg and Germany. Comparisons include the concepts of judicial review, constitutionalism and the role of the courts in the broader governmental system. The course will also explore how the European Union and the Canadian Supreme Court will integrate the legal system from both the Common Law and Civil Law legal traditions.
Mr. Miller/Offered every other year

GOVT258 U.S. SOCIAL POLICY
How are public policies made? What shapes social policies in the United States? This course will examine the process of making social policy in the United States. After looking at the actors and institutions involved in the policy-making process, we will focus on the development of some of the major areas of U.S. social policy such as social welfare and health policy. Staff/Offered periodically

GOVT259 POLITICAL PARTICIPATION IN THE UNITED STATES
In this class we will consider the different types of political activity in which American citizens engage, evidence regarding changes in Americans' political participation over time, and techniques that have been proposed to increase political participation. We will consider survey research on who participates in different types of activities, considering the role of, among other things, race, gender, education and income. We will then study different types of participation, including voting, interest group membership, jury service, and membership in religious and public-service organizations. Mr. Boatright/Offered every other year

GOVT260 DEMOCRATIC THEORY/LECTURE, DISCUSSION
This course fulfills the political-theory requirement for the government department. It traces the development of democratic theory from its origins in ancient Athens to the present day. We will examine how diverse conceptualizations of democracy address key issues in democratic theory and practice, including the constitution of liberty, equality and political authority; the definition and actualization of citizenship; the proper relationship between the individual and the state; the proper balance between majority and minority rights; and the best means for citizens to participate in democratic government. We will consider each of these key issues through our reading of influential works in the development of democratic theory and our active discussion of these works. This reading and discussion will enable us to broaden both our understanding of the democracy in which we live and our role as citizens within it. Formerly GOVT156. Not open to students with credit for GOVT156. Mr. Posner/Offered every other year

GOVT262 REPRESENTATION AND DELIBERATION THEORY/LECTURE, DISCUSSION
Representative democracy rests upon two competing expectations – first, that elected officials faithfully represent the views of their constituents; and second, that elected officials deliberate amongst each

other about policy outcomes. This course examines the tension between these two expectations – under what circumstances should representatives ignore the views of their constituents? How should they act when they conclude that their constituents do not know what is best for them? And how can they represent the views of minorities? The course will draw equally from theoretical works on representation and deliberation and from applied work on contemporary problems in representation and deliberation – subjects include difference in voting and legislative systems, redistricting, and representation of racial and ethnic minorities. Mr. Boatright/Offered periodically

GOVT268 Peace and War

Through an examination and analysis of the various theories in the field of international relations as related to the origins, duration and conclusion of wars. Looking at both historical and contemporary cases, we will assess the factors that contribute to the outbreak of war (i.e., nationalism, territory, economics and security dilemmas) as well as the emergence of peace (i.e., international institutions, alliances and the balance of power). The course concludes with an exploration of the challenges for preventing future wars and enhancing the possibility of peace. Ms. Williams/Offered periodically

GOVT269 Comparative Foreign Policy/Lecture, Discussion

This course explores the impact of both domestic factors and the international setting on the foreign-policy process. Courses in foreign-policy analysis have traditionally focused on the ways in which governments pursue the "national interest" through various implements of statecraft (military force, diplomacy, economic statecraft). While this course does encompass this traditional interpretation of foreign policymaking, we will also examine the ways in which an ever-changing international political environment has altered the conduct of foreign policy and state behavior. Relevant changes include the proliferation of multilateral instruments and institutions, the rise of non-state actors and NGOs, the increasing salience of issue areas such as energy, technology and human rights, and the emergence of new policy options and constraints specific to the post-Cold War era. Befitting its title, the course is devoted to cross-national comparison of foreign-policy interests, process and outcomes in a range of countries (excluding the United States). Mr. Butler/Offered periodically

GOVT271 The American Jury System/Lecture, Discussion

This course examines the evolution of the concept of a "jury of one's peers" over the course of American history, with particular emphasis on changes in the jury system in the past three decades. Topics include efforts to ensure the representation of racial minorities and women on juries, the ways in which juries are selected, psychological literature on jury deliberation and decision making, and recent efforts to reform jury selection and jury service to increase the representativeness of jurors, the satisfaction of jurors with their service, and the ability of jurors to arrive at fair verdicts. The course will include a visit to the Worcester district court to observe jury selection. Mr. Boatright/Offered periodically

GOVT272 U.S. Constitutional Law: Civil Liberties/Lecture, Discussion

Focuses on the historic and contemporary role of the U.S. Supreme Court in interpreting the U.S. Constitution. Includes cases dealing with freedom of religion and speech, privacy, discrimination and equal protection. Students may take GOVT272 and 273 in any order. Mr. Miller/Offered every other year

GOVT273 U.S. Constitutional Law: Governmental Powers/Lecture, Discussion

Focuses on the historic and contemporary role of the U.S. Supreme Court in interpreting the U.S. Constitution. Includes cases dealing with powers of Congress and the President, federalism and economic rights. Students may take GOVT272 and 273 in any order. Mr. Miller/Offered every other year

GOVT274 The Supreme Court in American Society/Lecture, Discussion

Examines various aspects of the role that the Supreme Court of the United States plays in our system of government and in our broader social order. Examines various topics, such as the role of the Court in producing social change, the jurisprudence of individual justices, and recent trends in the Court's decisions on federalism, administrative law and statutory interpretation. Also explores the aftermath of the Court's decision in Bush v. Gore. Mr. Miller/Offered periodically

GOVT275 Gender, Politics and Development in Africa/Seminar

The course examines a range of issues involving questions of gender, politics and development, including gendered political participation at the local and national levels, gendered rights under customary and introduced law, and the role and impact of gender on civil conflict, war and genocide. The course also explores the role of gender in the HIV/AIDS crisis, structural adjustment programs, Islamic Shariah law and female genital cutting. Ms. Grier/Offered periodically

GOVT276 Environmental Law/Lecture, Discussion

A survey course in environmental law, with special emphasis placed on the practical skills necessary to understand and apply environmental laws and regulations. Topics include the history and development of modern environmental law, basic administrative law principles, water-pollution control, wetlands protection, environmental-impact review, solid- and hazardous-waste management, disposal and site remediation, plus land-use controls and "takings" issues. Covers the major federal environmental statutes and draws upon Massachusetts law for examples of state and municipal initiatives. Staff/Offered every year

GOVT278 Holocaust and Genocide in Comparative Perspective

An investigation of the Holocaust and other total genocides by the comparative historical method. The situation and actions of the perpetrators, victims, resistance fighters, bystanders and rescuers will be examined in order to find essential similarities as well as differences and to derive explanations for select cases of genocide. Mr. Melson/Offered periodically

GOVT281 The Politics of Policy Implementation/Seminar

Explores, in-depth, the philosophical, legal, political and organizational challenges of implementing public policy and enforcing public law. Focuses specifically on the political and managerial challenges administrative agencies face. Students confront implementation dilemmas through case studies and research on agencies and policies. Prerequisite: GOVT154 or permission of instructor. Mr. Cook/Offered every other year

GOVT282 Housing Policies and Politics/Seminar

Focuses on social, economic and political factors that shape the federal government's housing policies and their implementation by local governments in metropolitan areas of the United States. Explores the myths and realities of public housing, urban renewal, gentrification, linkage, homelessness, redlining, exclusionary zoning, and racial and gender discrimination in housing. Ms. Krefetz/Offered every other year

GOVT283 Global AIDS: The Pandemic in Comparative Perspective/Seminar

This course examines the HIV/AIDS crisis across the globe from a comparative perspective. The countries covered include: Brazil, Haiti, Cuba, United States, Russia, the Ukraine, Morocco, Iran, India, Thailand, China, Senegal, Kenya, Uganda, Botswana, and South Africa. The course compares and contrasts the history of the disease in each country, the modes of infection, the impact of the disease on the economy, society and politics, the gendered nature of the disease, the impact of the disease on children (including AIDS orphans), and the responses of local governments and civil society and international institutions, NGOs, wealthy countries and major pharmaceutical companies. Ms. Grier/Offered every other year

GOVT284 The Vietnam War/Lecture, Discussion

See History 286.

GOVT285 Special Topics in Peace Studies/Seminar

See Peace Studies 285.

GOVT286 Advanced Topics in Comparative Politics/Seminar

Focus changes each year depending on faculty interest. Has focused on "International Feminist Thinking" and "Politics of Nationalism." Open to juniors, seniors and graduate students. Can be taken twice. Mr. Posner, Ms. Grier, Ms. Sperling/Offered every year

GOVT289 Advanced Topics in International Relations/Seminar

Focus changes with each offering, depending on faculty interest. Recent topic: development, underdevelopment and the causes of internal conflict. Open to juniors and seniors. Can be taken twice. Staff/Offered every year

GOVT290 Inter-American Relations/Seminar

This course examines the historical and contemporary relations between the United States and Latin American countries. After a brief historical overview of U.S. foreign policy toward Latin America, we will explore various themes central to U.S.-Latin American relations. Topics include the impact of U.S. hegemonic rule; revolutionary challenges to U.S. hegemony; economic relations, including Dollar Diplomacy and NAFTA; defending national security, democracy and human rights; the "war on drugs"; and the Latin Americanization of the United States. While we will seek a deeper understanding of common patterns in U.S.-Latin American relations, the course will also emphasize the uniqueness of national experiences. Mr. Posner/Offered every other year

GOVT291 Lawyers and Politics/Seminar

Examines the role played by lawyers in American politics. Topics include lawyers in private practice, lawyers in legislatures, lawyers as judges, lawyers as lobbyists, government-agency lawyers and academic lawyers. Mr. Miller/Offered every other year

GOVT293 Constitutional Democracy/Seminar

Writing a constitution means creating a people. It is at once a very conservative and a very daring undertaking. It is also the most fundamental of political acts. What considerations are within the purview of the constitution maker? What consequences follow from founding choices? Through analyses of the constitutions and constitutional foundings of the United States, India and South Africa, and through original student research, we will confront these questions and the complexities of blending constitutionalism and democracy. Prerequisites: GOVT050, or permission of instructor. Limited to juniors and seniors. Mr. Cook/Offered periodically

GOVT295 Altered States/Seminar

How does globalization affect democracy? As economics, politics, military action and social-change movements have become increasingly transnational, have state leaders become less accountable to their populations, and are they under little pressure to build liberal democratic institutions? Or has the increasingly global system been good for democratic state-building? Have transnational forces successfully pressured states to observe human rights and fight against corruption? Do they encourage state leaders to build accountable economic and legal institutions? We will examine a variety of states and their struggles to consolidate liberal democracies, including: Sierra Leone, Cambodia and Russia.

GOVT296 Advanced Topics in American Politics/Seminar

Focus changes with each offering, depending on faculty interest. A past topic was "Politics of Rich and Poor." Open to juniors and seniors. Can be taken twice. Staff/Offered periodically

GOVT297 Honors Thesis

GOVT298 Internship

GOVT299 Independent Study

HISTORY

Program Faculty

Drew McCoy, Ph.D. - *Chair*
Debórah Dwork, Ph.D.
Janette T. Greenwood, Ph.D.
Willem Klooster, Ph.D.
Thomas Kuehne, Ph.D.
Nina Kushner, Ph.D.
Douglas Little, Ph.D.
Ousmane Power-Greene, Ph.D.
Amy Richter, Ph.D.
Paul Ropp, Ph.D.

Adjunct Faculty

John Brown, Ph.D.
Paul Burke, Ph.D.
Richard Ford, Ph.D.
Everett Fox, Ph.D.
Beverly C. Grier, Ph.D.
Thomas Massey, Ph.D.
Mark Miller, Ph.D.

Affiliate Faculty

Robert Dykstra, Ph.D.
Jack Larkin, M.A.
Alden Vaughan, Ph.D.

Emeriti Faculty

George A. Billias, Ph.D.
Daniel Borg, Ph.D.
Paul Lucas, Ph.D.

Program Overview

The History Department offers a traditional major, a minor and elective courses for nonmajors. Undergraduate majors must choose one of three areas of geographic specialization—United States, European or global history. These specializations may be linked to course work in interdisciplinary concentrations such as Asian studies, Holocaust studies or women's studies. The History Department also offers a general track within the major for those seeking certification in elementary education.

The major exposes students to different fields of knowledge, offering training in critical thinking; the accumulation, organization and analysis of information; and clear and concise writing. The major provides an excellent background for graduate school, teaching, careers in law, government, journalism, international affairs, museum, library and archival work, and business. With courses on every major geographical area of the world, and with conceptual approaches ranging from political and diplomatic to social, intellectual and cultural, the History Department offers a rich and diverse curriculum.

The department also participates in Clark's Higgins School of Humanities, allowing students to enjoy the support and benefits of the school.

Undergraduate Requirements

All history majors must take 10 history courses and two related non-history courses distributed as follows:

1. HIST120 Writing History, preferably before the junior year and before taking a research seminar.
2. Five courses inside their geographic area of specialization. Of these five courses, at least three must be at the 200 level and at least one must be a seminar or a proseminar.
3. At least one course in each of the two geographic areas different from their own area of specialization. (For example, a student specializing in European history would need to take at least one U.S. and one global-history course). At least one of these two courses must be at the 200 level.
4. At least one course, either inside or outside their area of specialization, devoted primarily to the period before 1800. An up-to-date list of courses that meets this requirement may be found in the History Department Handbook.
5. A capstone course during the senior year. This requirement may be fulfilled by writing an honors thesis, or (with the permission of the chair and instructor) by taking a research seminar or directed-research course in the student's area of specialization. The capstone requirement cannot be met by any course used to meet conditions one through four.
6. Two courses outside history in fields related to the student's area of specialization. These courses must be approved in advance by the student's history adviser and must be taken after the student has declared herself or himself to be a history major.

Majors select an adviser from the history faculty and they consult regularly, especially before registering each semester. The student and adviser design a coherent sequence of courses, and choose nonhistory courses that enhance the area of concentration. They also can make decisions about advanced research courses and enrollment in the departmental honors program.

General Track for Elementary Education Certification

This track may be taken by any student who is preparing to become certified to teach in Massachusetts at the elementary level and is available only to those students who are completing the education program in elementary education. Like the regular history major, the general track also requires 10 courses in history and two courses outside of history. The requirements for the general track are as follows:

EDUC283 Ways of Knowing: Social Science
HIST120 Writing History
HIST011 Survey of U.S. History to 1865
HIST012 Survey of U.S. History Since 1865
HIST070 Our European Roots I (Western Civ. To 1600)
HIST071 Our European Roots II (Western Civ. Since 1600)

- One thematic course in each of three areas (1) U.S. history; (2) European history; and (3) non-Western history. Two must be at the 200 level and at least one must be a proseminar or seminar to be taken junior year.
- Capstone requirement completed during the student-teaching practicum, under the supervision of the student's clinical faculty adviser in the Education Department and the student's adviser in the History Department.
- One course in American literature
- One course in European or non-Western literature

Honors Program

The honors program in history provides outstanding majors with a challenging set of advanced courses and opportunity to pursue independent research. By the time that they become juniors, most history majors have discovered a particular topic that fascinates them, and some decide to explore that topic in greater depth by choosing the honors option. Honors in history is demanding. Completion of the honors program is also one of the requirements for admission to the department's accelerated degree program. Students enter the program by taking a prehonors seminar or proseminar. Admission into the honors program is contingent upon the completion of a prehonors seminar and upon evidence of outstanding work in other history courses. Building on the prehonors course, students write an extensive research thesis (two course credits) under the adviser's supervision. Seniors take a directed-reading course (one course credit) related to their thesis topic. The program culminates with an oral defense of the student's thesis. The honors committee includes the student's thesis adviser and one other department member. If the committee finds the thesis or examination unsatisfactory, the student receives credit for directed readings/research.

The Prehonors Seminar or Proseminar

To enroll in the honors program, students must take one of the department's seminars or proseminars that emphasize the development of research, analytical and writing skills. A significant part of these courses is devoted to the writing and revising of research papers. Students should consult with their advisers or the department chair in selecting a course that satisfies the prehonors requirement. This course is normally taken during the junior year.

History Minor

Students who wish to obtain an undergraduate minor in history must meet the following requirements: a minimum of six history courses, at least three at the 200 level, and no more than four in any one geographical area. At least one of the six courses must be a seminar or a proseminar.

Accelerated Degree Program

History offers an accelerated B.A./Master's degree program to eligible students. For more information, visit www.clarku.edu/accelerate.

Graduate Program

The department offers graduate programs in two broad areas: America, with tracks in the history of the United States and in the history of the Atlantic World; and, modern Europe, with tracks in the history of the Holocaust and in genocide studies. (Please note that applicants to the modern Europe program must intend to pursue one of these two specialized tracks). Both of these areas of study are augmented by instruction in non-Western areas. The department has particular depth in women's history (European, American, and Chinese), American diplomatic history, and Holocaust and genocide history. Our close ties with the American Antiquarian Society and Old Sturbridge Village in Sturbridge, Mass., are wonderful assets for graduate students in United States history. The department offers a graduate internship for credit at Old Sturbridge Village.

Graduate course work includes reading seminars (colloquia), research seminars and individual tutorials for both reading and research purposes. Graduate students may also register in upper-division undergraduate courses at a graduate level that requires more intensive work. First- and second-year students in the doctoral program take three courses each semester, one of which must be expressly devoted to the production of a research paper. Faculty advisers help incoming students design their programs, which may include courses in other departments or colleges in the Worcester Consortium.

Requirements

Master of Arts

Because of its limited size, the department offers a terminal M.A. only through the Accelerated B.A./M.A. Program, limited to qualified Clark undergraduate history majors. For more specific information regarding the application process and requirements, please contact the History Department.

Doctor of Philosophy

The doctorate enables students to master the discipline of history through research, reading and teaching. In addition to meeting the 12-course requirements outlined above, a student who enters without an M.A. degree usually spends at least two full-time years at Clark, must satisfy the language requirement, teach at the college level, pass the preliminary examination and write a doctoral dissertation within seven years of matriculation. (Residency for part-time Ph.D. students is defined in terms of courses taken.)

Students concentrating in United States history must pass an examination in one foreign language, normally French, German, Spanish or Russian. Those specializing in Holocaust and genocide studies must pass examinations in two foreign languages, normally French and German. An examiner in each language determines if the student is proficient enough to use the language as a research tool. All language requirements must be satisfied before the preliminary oral examination is scheduled.

At the end of the first year, there is a required one-hour oral exam based on the first year's course work whether or not students have an M.A.

Some teaching experience at the college level is desirable for the Ph.D. degree. Students normally meet this requirement in their second and third years as teaching assistants.

New students, with their advisers, devise an appropriate plan of preparation for their doctoral qualifying examination, which is normally taken before the end of their third year.

Examination details are in the History Department Graduate Program Handbook. The exam constitutes the preliminary examination required by the Graduate Board. Students who pass may, upon request, receive the Master of Arts.

Students are advised to consider dissertation topics during their years of residence and to choose a possible dissertation adviser as soon as possible. The process of writing a dissertation is outlined in Format Regulations for Theses, Dissertations, and Research Papers at Clark University, which may be obtained from the thesis format adviser in the Graduate School Office.

Courses

HIST011 SURVEY OF U.S. HISTORY TO 1865/LECTURE, DISCUSSION

A survey of American history from the earliest 17th-century settlements through the end of the Civil War. Introduces students to historical inquiry and stimulates creative inquiry into the origins and character of American civilization. Fulfills the Historical Perspective.
Mr. McCoy/Offered every year

HIST012 SURVEY OF U.S. HISTORY 1865/LECTURE, DISCUSSION

Chronicles the rise of America to world power, focusing on key internal and foreign-policy developments and conflict. Private and public life and the diversity of Americans' experiences are highlighted. Attention is given to general political, social, economic and intellectual developments. Fulfills the Historical Perspective. Ms. Richter, Ms. Greenwood/Offered every year

HIST016 RACE AND ETHNICITY IN AMERICAN HISTORY/LECTURE, DISCUSSION

Explores the influence that racial and ethnic patterns have on American history from colonial times to the present. Largely through first-hand accounts, students will explore the experiences of various ethnic and racial groups in American history. Fulfills the Historical Perspective. Ms. Greenwood/Offered every year

HIST021 VOICES FROM SLAVERY/FIRST-YEAR SEMINAR

Explores the nature and dynamic of American slavery, largely from first-hand accounts of those who experienced and observed the slave regime of the American South in the 19th century. Designed to introduce students to the historical controversies concerning slavery and to expose students to the primary sources that historians use to understand slavery and the slave regimes. Fulfills the Values Perspective.
Ms. Greenwood/Offered periodically

HIST033 CONFUCIANISM, DAOISM, BUDDHISM: THE CULTURAL HERITAGE OF CHINA/FIRST-YEAR SEMINAR

This seminar will explore the most important intellectual and religious traditions of China – Confucianism, Daoism and Buddhism. In the first half of the course, we will cover the formative development of Confucianism and Daoism in China from about 500 BCE to roughly 200 CE; in the second half of the course, we will explore the rise of Buddhism in China and the later development of Confucianism and Daoism. Our method will be to read and discuss primary written sources (in English translation) from within these philosophical, religious and cultural traditions. We will try to understand the "inner logic" of each author, each tradition and each school of thought, on its own terms. Lectures will provide historical background on the development of these three traditions. In frequent class discussions, we will focus on the interpretation of primary sources in Chinese philosophy, religion, art and literature. Fulfills the Historical Perspective. Mr. Ropp/Offered every other year

HIST036 THE STRANGE WORLD OF THOMAS JEFFERSON/FIRST-YEAR SEMINAR
Thomas Jefferson is one of the most familiar and increasingly controversial figures in American history. This seminar explores in-depth two related subjects: Jefferson's life and career (with emphasis on the intersection of the public and the private), and the central place of Jefferson's reputation and image in American culture from his time to ours. Students will read widely in recent scholarship on Jefferson as well as in primary sources. Fulfills the Historical Perspective. Mr. McCoy/Offered periodically

HIST037 19TH-CENTURY AMERICA THROUGH WOMEN'S EYES/ FIRST-YEAR SEMINAR
How is our understanding of the past transformed when we look at it through women's eyes? This seminar explores the major developments of 19th-century American history industrialization, slavery, westward expansion, immigration and reform, as captured in women's narrative writings, diaries, letters, autobiographies and autobiographical fiction. Its goals are three-fold: to introduce students to history as a lively scholarly discipline (as opposed to a timeless and fixed story of the past); to familiarize students with the central questions of women's history; and to train students in the reading, analysis and critique of primary sources. What will emerge at the end of our investigation is an understanding of the ways in which the experience and production of history are shaped by gender and, in turn, how the experience and production of gender are shaped by history. Fulfills the Historical Perspective. Ms. Richter/Offered periodically

HIST040 WITCHCRAFT: WITCH HUNTS IN EARLY MODERN EUROPE/ FIRST-YEAR SEMINAR
From 1450-1750, hundreds of thousands of people were investigated for this crime of witchcraft across Europe and North America. Tens of thousands of them, mainly women, were executed. Over the course of the era, the figure of the witch as an ally of the Devil emerged and became an indelible part of Western culture. Yet scholars doubt that very many people in this period actually practiced witchcraft, or at least did so in the ways imagined by their prosecutors. The question then is why did all this happen? How was the figure of the witch and the practice of witchcraft constructed? Why did they engender such panic at this particular time? Why were women so often accused? Why did the hunts begin and just as important, why did they end?

The course will explore the history of the witch craze in order to provide the perspective to answer these questions. In the process, we will work on developing skills essential to the study of history: How do you pull the main points, the argument, out of a reading? How do you assess that argument? What is the raw material of history and how do historians use this raw material to write history? Ms. Kushner/Offered every other year

HIST062 WAR AND PEACE IN THE MIDDLE EAST/FIRST-YEAR SEMINAR
Explores the cycle of war and peace in the Middle East during the past 100 years in order to answer three questions: What role has ethnic identity played in prolonging violent conflict in the region, not merely between Arabs and Israelis, but also between Shiite and Sunni Muslims? Have the United States, the Soviet Union and the other great powers served more as peacemakers or troublemakers in the Middle East? To what degree is the contemporary confrontation between America and radical Islam "a clash of civilizations"? Case studies will range from the birth of Israel to the September 11 attacks and their aftermath. Students will write a series of brief essays based on historical and literary documents ranging from the Balfour Declaration to Osama bin Laden's fatwa against the United States. Fulfills the Historical Perspective. First preference for enrollment will be given to students in the International Studies Stream. Others will be admitted on a space available basis. Mr. Little/Offered periodically

HIST070 OUR EUROPEAN ROOTS: WESTERN CIVILIZATION FROM ANCIENT HEBREWS THROUGH THE RENAISSANCE AND REFORMATION/ LECTURE, DISCUSSION
Outlines developments of Western society and our collective identity. Presents historical angles—cultural, religious, political, military, economic and social—and integrates these analytical approaches into a coherent, popular narrative. The medieval period is emphasized as the root of modern history. HIST070 and 071 are parts of a whole, but either course may be taken without the other. Fulfills the Historical Perspective. Ms. Kushner, Mr. Klooster/Offered every year

HIST071 OUR EUROPEAN ROOTS: WESTERN CIVILIZATION FROM THE 17TH CENTURY TO THE PRESENT/LECTURE, DISCUSSION
Same goal as HIST070. Covers the military revolution of the 16th century, the bureaucratic and scientific revolutions of the 17th century, the 18th-century Enlightenment, and the political, industrial, intellectual and social revolutions of the 19th and 20th centuries. HIST070 and 071 are parts of a whole, but either course may be taken without the other. Fulfills the Historical Perspective. Staff/Offered every year

HIST080 INTRODUCTION TO MODERN EAST ASIA/LECTURE, DISCUSSION
Surveys modern historical trends in India, China, Japan, Southeast Asia and Korea. Through political biographies, literary selections and general histories, the course compares native traditions, colonial experiences and postcolonial developments in Asia since roughly 1800. Fulfills the Historical Perspective. Mr. Ropp/Offered every other year

HIST103 AFRICA AND THE WORLD/LECTURE, DISCUSSION
See Government and International Relations 103.

HIST110 EARLY MODERN EUROPE/LECTURE, DISCUSSION
An introduction to the history of Europe between 1400 and 1800. Students will examine the primary social, economic, religious, political and cultural events of the period and will gain an understanding of the important changes that occurred in the early modern era. Explores the Renaissance, Reformation, development of the state, emergence of capitalism, crisis of the 17th century, and French Revolution. Ms. Kushner/Offered every year

HIST111 INTRODUCTION TO WOMEN'S STUDIES
In this course we will explore the ways in which ideas about femininity and masculinity have shaped women's lives—locally and globally, in the present and historically—and how some women have challenged, even transformed, those meanings and the social relationships that flow from those two potent ideas. Among the topics that may be considered are: beauty, war, sports, politics, women's movements, sexuality, race, work, violence, fashion, family, globalization, feminism, creativity, religion, media and girlhood. This course will be taught in rotation by one of the following faculty: Prof. Ewing (Sociology), Prof. Richter (History) or Prof. Gale (Foreign Languages and Literatures). This course is open to all students in all majors. No prerequisites.

HIST113 AMERICAN URBAN HISTORY/LECTURE, DISCUSSION
Examines the urban experience in what is now the United States from its multiethnic colonial origins to its multiracial present. Emphasizes the relationship between the spatial and the sociopolitical organization of the city, from the Salem witch hunts through the Los Angeles riots.

Focuses on several case studies, including Worcester and New York City. Fulfills the Historical Perspective. Ms. Richter/Offered every other year

HIST115 AUTHORITY AND DEMOCRACY: THE HISTORY OF MODERN CENTRAL EUROPE/LECTURE, DISCUSSION

This course serves as an introduction to the political, social and cultural history of the "heart of Europe" from the late-18th century through the end of the 20th century. It is not only concerned with Germany, but also with the various German-speaking regions of Europe and the interaction of the major cultures in that area. The course will start with the collapse of the political and social constitution of the Ancient Regime and the impact of the French Revolution on Central Europe. The course will trace the outbreak of the First World War and the impact it had on society. It will then explore the paradoxes of the "Age of Extremes" (E. Hobsbawm): the rise of a modern mass culture and the radicalization of mass violence during the first half of the century, the collapse of fragile democracies in the 1930s, the stabilization of the Nazi regime, and the organization of the Holocaust. The last part of the course will trace the irregular and unexpected developments toward democracy, peace and civil society since 1945 in a divided Central Europe. The course will conclude with an evaluation of the reunification of Germany and the future role of Germany in Europe. Mr. Kuehne/Offered every other year

HIST117 READING THE NARRATIVES OF THE HEBREW BIBLE/ FIRST-YEAR SEMINAR

See Jewish Studies 117.

HIST120 WRITING HISTORY/PROSEMINAR

Introduces students to the discipline of history, with emphasis on the different types of historical writing and on the issues involved in the research and writing of historical studies. Staff/Offered every semester

HIST130 GENOCIDE

See Sociology 130.

HIST135 HISTORY OF ARMENIA/LECTURE, DISCUSSION

Introduces the history of Armenia from antiquity to the modern times. Examines the formation of the Armenian state as an independent entity, the role of the major powers (eg, Byzantium, Persia), and the social and political institutions under the Armenian monarchies (eg, Bagratuni, Cilicia). Covers the history of modern Armenia from the late-18th to the 20th century, including the development of modern Armenian culture and political life in Ottoman and Russian Armenia. The course examines the emergence of the Armenian national movements, the events leading to the genocide, and the creation of the Republic of Armenia, Soviet Armenia, the re-emergence of the Republic of Armenia after the collapse of the Soviet Union, and the current issues confronting the Republic. Mr. Payaslian/Offered every year

HIST142 CENTRAL EUROPE IN THE LONG 19TH CENTURY (1756-1914) LECTURE/DISCUSSION

The "heart of Europe" – mainly the territory of today's Germany, Poland and the former Habsburg Empire – is often seen as crucial for the fate of Europe. The course surveys the political, social, economic and cultural history of Central Europe in a period which was shaped by struggles between ethnical and religious movements, monarchs and citizens, the bourgoisie and the working-class, as well as the rise of modern nation-states and imperialism that led to the First World War. Mr. Kuehne/Offered every year

HIST143 WAR AND PEACE: CENTRAL EUROPE, 1914-2003

The "heart of Europe" is often seen as crucial to the fate of Europe. This is true for the recent process of European unification and even more for the period of mass violence and genocide, which shaped Europe's history in the first half of the 20th century. This course will trace the outbreak of the First World War and the impact it had on the political and social landscape of Central Europe. Special attention will be paid to the historical reasons and the political problems of the changing borders and borderlands of nations like Germany, Austria, Poland, Hungary and Czechoslovakia. The course then explores the paradoxes of the "Age of Extremes" (E. Hobsbawm): the rise of a modern mass culture and the radicalization of mass violence during the first half of the century, the collapse of fragile democracies in the 1930s, the stabilization of the Nazi regime, the organization of the Holocaust, and the consequences of the war of extermination in Central Europe. The course will conclude with an evaluation of the reunification of Germany and the future perspectives of Central Europe as a center part of the European Union. Mr. Kuehne/Offered biannually

HIST145 U.S. HISTORY THROUGH THE NOVEL/LECTURE, DISCUSSION

Introduces American history with a distinctive and unconventional approach, resting on the assumption that we can gain access to the past by reading fiction. Students learn how to approach imaginative literature from an historical perspective and to appreciate the historical insight of writers who were keen observers of aspects of the making of modern America. Fulfills the Historical Perspective. Mr. McCoy/Offered every year

HIST150 JERUSALEM IN HISTORY AND IMAGINATION/LECTURE, DISCUSSION

See Jewish Studies 150.

HIST152 JEWS IN EARLY MODERN EUROPE AND COLONIAL AMERICA/ LECTURE, DISCUSSION

Between ca. 1400 and ca. 1800, the rights of most European Jews were severely restricted. Their story can only be told if we take into account the actions and measures of "gentiles" vis-a-vis the Jews. Having established what these conditions were, we will direct our attention to Jewish cultural and religious practices. The course starts with late medieval Christian myths and stories about Jews, scapegoat mechanisms and outright persecution. The course will end with the extension of greater freedom to the Jews in the Age of Democratic Revolutions, which made the question of assimilation an important issue. Mr. Klooster/Offered periodically

HIST153 EUROPE IN THE AGE OF EXTREMES: THE 20TH CENTURY

This course serves as an introduction into the political, social and cultural history of Europe from the beginning to the end of the 20th century. The survey is concerned with World War I and World War II, and with the nature of postwar stabilization and recovery. It focuses on the rise of dictatorships and the radicalization of mass violence during the first half of the century, as well as on the developments toward democracy, peace and civil society since 1950. The course will conclude with an evaluation of the remaking of Eastern and Western Europe in the 1980s and 1990s, the return of war and genocide to Europe, and present debates on the future of Europe. Mr. Kuehne/ Offered every year

HIST161 MODERN INDIA/LECTURE, DISCUSSION

Through the study of cultural and historical documents as well as modern historical scholarship, studies the history of India emphasizing the nature of British rule in India from the 17th century to the mid-20th century. Formerly titled British India. Fulfills the Historical Perspective. Staff/Offered periodically

HIST162 The History of the Modern Middle East/Lecture, Discussion
Focuses on Middle Eastern history and society from World War I to the present. Major themes include the collapse of the Ottoman Empire and the emergence of nation-states; colonial rule in the Arab world and the struggle for independence, the Arab-Israeli conflict; the rise of Islamic fundamentalism, and the impact of oil. Fulfills the Historical Perspective. Mr. Little/Offered periodically

HIST165 Nazi Germany/Lecture, Discussion
Introduces students to the rise, the fabric, and the fall of the "Third Reich." It starts with an investigation in how the Nazis came into power and why the first German democracy failed. The course then focuses on two related issues. Both are revolving around the success and the impact of Nazi politics in Germany and in Europe: How could Hitler and the Nazi Party establish its power in a country which was seen as a heart of Western culture? And: Why did so few Germans oppose Hitler and his racially based, terrorist regime? Mr. Kuehne/ Offered biannually

HIST174 The Jewish Experience/Lecture, Discussion
See Jewish Studies 174.

HIST175 Holocaust: Agency and Action/Lecture, Discussion
This course is an introductory, gateway course to the history of the Holocaust. It aims to provide a foundation for more specialized seminars and lecture courses in this field (many of which are offered by the History Department), and is required for the concentration in Holocaust and genocide studies. The Holocaust was not a natural disaster, nor is history predetermined. Looking at a range of people, from national leaders to army generals to local religious figures to student activists, to victims, we will examine the choices they confronted and the actions they took. This course spans many centuries and covers the continent of Europe. Our primary focus, however, is the National Socialist era and the Holocaust. Ms. Dwork/Offered every other year

HIST178 South Africa: History and Contemporary Politics/ Lecture, Discussion
See Government and International Relations 178.

HIST181 Chinese Civilization/Lecture, Discussion
Focuses on Chinese life, institutions and culture from the earliest times through the mid-19th century. Creative literature, philosophical writings and selected primary documents supplement information presented in interpretive texts and lectures. Fulfills the Historical Perspective. Mr. Ropp/Offered every other year

HIST182 Modern China/Lecture, Discussion
Introduces events, personalities and concepts of importance for understanding China's history from the early-19th century to the present. Readings that present the Chinese view of events supplement interpretative studies by Western scholars. Fulfills the Historical Perspective. Mr. Ropp/Offered every other year

HIST201 Era of the American Revolution/Lecture, Discussion
Studies the origins, character and consequences of the American Revolution, from the erosion of imperial authority in the 1760s and 1770s to the Constitutional Convention of 1787. Emphasizes relation of ideology and political ideas to social development. Mr. McCoy/ Offered every other year

HIST202 The Early American Republic/Lecture, Discussion
Studies formation and testing of the early United States from the adoption of the Constitution through the Jacksonian era. Emphasizes ideology, public policy and the problem of national integration during an age of extraordinary territorial and economic expansion. Mr. McCoy/Offered periodically

HIST204 Special Topics in U.S. History: American Social History/ Proseminar
Content varies with the interest of the instructor. A colloquium that takes a broadly conceptual and historiographical approach to the literature of American history. Permission of the instructor is required. Ms.Greenwood/Offered periodically

HIST205 Renaissance and Reformation/Lecture, Discussion
Charts the course of European history from ca.1300 to 1600. Reviews the devastation caused by the plague and examines the rise of the city-states in Italy. Deals with successful reformers (Luther, Zwingli, and Calvin), as well as the more short-lived radical currents such as the Anabaptists of Munster, who declared property to be in common, outlawed the use of money, and made polygamy compulsory. The course will also introduce the Spanish Inquisition and discuss everyday violence between Calvinists and Catholics in France. Mr. Klooster/ Offered every other year

HIST206 Africans in the Americas, 1500-1888/Lecture, Discussion
The European enslavement of Africans in the early modern period was closely connected to the colonization of the New World. Although slavery was their condition, this course presents Africans as more than just bonded workers. The transformations of their identities, ethnicities, religions and gender roles are key to understand the lives of African Americans. The African experience will be studied in a hemispheric framework that routinely compares structures and events throughout the Americas. The focus will be on African agency, from the African impact on the transatlantic slave trade, via the cultural practices that slaves transferred from their homelands, to African assertiveness in the New World as expressed in protest and marronage. Mr. Klooster/Offered periodically

HIST207 Explorations in History: Rural New England in the 19th Century
Focusing on a single region, this course will offer students several different thematic perspectives for exploring its history: life and death (demography); landscape and environment; work and technology; families and houses; schooling, literature and reading; patterns of community; material life; ritual and belief. It will alternate sessions between the classroom setting and Old Sturbridge Village, where the museum's exhibits and collections will be part of the educational environment. It will seek to provide a variety of learning experiences while remaining firmly anchored in primary sources and historical scholarship. Mr. Larkin/Offered every year

HIST209 U.S. History Since World War II/Lecture, Discussion
Examines the recent American past from Watergate through Generation X. Utilizes film and video to reacquaint students with figures ranging from Elvis Presley and Richard Nixon to Ronald Reagan and Anita Hill. Major themes include the death and rebirth of the affluent society, the persistence of ethnic and racial conflict, and the waning of the Cold War. Staff/Offered periodically

HIST210 Research Seminar in 19th-Century American History/Seminar

A combination of individual and collective endeavors. Focuses on historical research and writing. Students research a topic in 19th-century American history. Ms. Greenwood/Offered periodically

HIST211 American Consumer Culture/Seminar

Investigates the nature and meaning of the consumer experience in American history. Draws upon studies of advertising, domestic life and urban institutions, and examines the varied ways in which historians have defined and interpreted the importance of consumption within American life. Introduces students to the process of primary historical research. Ms. Richter/Offered periodically

HIST212 History of Sexuality: 1750 to the Present/Lecture, Discussion

Covers the history of sexuality from the Enlightenment to the present focusing on Western Europe. Students will examine how different societies in different times determined what was licit and what was illicit sexual behavior. Considers the efforts of governments, religious bodies, moralists, the medical profession and interest groups to regulate, repress or indeed encourage certain behaviors and attitudes. Specific topics include marriage, prostitution, birth control, the emergence of homosexual subcultures, and sexuality as identity. Ms. Kushner/Offered every other year

HIST213 Gender and the City in the United States/Seminar

Focusing on the 19th and 20th centuries, examines where urban life for men and women diverged and where it met. Readings on men, women and urban space, reform movements, utopian ideals and other topics are followed by student research projects using local resources. Ms. Richter/Offered periodically

HIST214 The American Civil War/Lecture, Discussion

Examines events and trends precipitating the single greatest crisis in American history, the Civil War of 1861-65. Includes consideration of the behavior and experience of Americans during the war itself. Mr. McCoy/Offered every other year

HIST215 The Age of Lincoln/Proseminar

A reading, discussion and research course focusing on an extraordinary individual and his times. Emphasizes biography and the relationship between the private and the public in Abraham Lincoln's life, which becomes the vehicle for better understanding the distinctive problems and concerns of American society, culture and politics from approximately 1815 through the end of the Civil War. Mr. McCoy/Offered every other year

HIST216 African American Internationalism/Proseminar

Content and topics vary with instructor's interests. A reading and discussion course exploring the advantages of taking a comparative approach to selected key themes and issues in the history of the United States. Permission of the instructor is required. Mr. Power-Greene/Offered periodically

HIST217 Reconstruction: America after the Civil War, 1865-1877/Seminar

Examines American history in the post-Civil War period, from 1865 to 1877, a period of national redefinition and political and social experimentation. Explores how Americans struggled with the consequences of the Civil War and emancipation. Grounds students in the historical literature of the Reconstruction era while emphasizing original student research in local sources. Ms. Greenwood/Offered periodically

HIST219 History of American Women/Lecture, Discussion

Examines female experience in the United States, focusing on issues of power, race, ethnicity and class, and on concepts of work, family and gender, with their ramifications for the world of both sexes. Fulfills the Historical Perspective. Ms. Richter/Offered every year

HIST221 African American History to 1865/Lecture, Discussion

Examines the historial experience of blacks in America from the colonial period through the Civil War. Among the topics explored are the evolution of slavery and changing conceptions of race. Mr. Power-Greene/Offered every year

HIST222 History of the South/Lecture, Discussion

Explores the history of the South from the colonial period to the present, focusing on how the South developed as a distinctive region of the United States. Examines development of slavery; impact of slavery on the economy, politics and culture of the South; race, class and gender in the Old and New South; myth and reality of the New South; the South in the 20th century. Ms. Greenwood/Offered periodically

HIST223 The Civil Rights Movement/Lecture, Discussion

Examines roots and evolution of the civil-rights movement from the 1930s to the present. Includes civil rights as a grassroots movement; the New Deal, World War II and civil rights; emergence of Martin Luther King; women and the civil-rights movement; black power; the disintegration of the movement; the meaning of civil rights today. Ms. Greenwood/Offered every other year

HIST226 Comparative Colonialism/Seminar

Seeks to examine the ways in which Spanish, Dutch and English societies evolved in the New World from 1492 to 1824. Topics include the motives and backgrounds of settlers, encounters with natives, syncretism, the search for crops and precious metals, contacts with the mother countries, the contributions of Africans, and the revolutions that made an end to the mainland empires. Mr. Klooster/Offered periodically

HIST227 The Caribbean in the Era of Slavery, 1492-1886/Lecture, Discussion

The first encounters between Europeans and Indians occurred in the Caribbean. Spanish arms, germs and labor demands dramatically reduced the numbers of natives, while changing their world beyond recognition. A second profound transformation took place in the 17th century, when other European powers moved into the area. From an economic backwater, the Caribbean became an economic laboratory, the site of a profoundly capitalist transformation. A new demographic environment was created as the coexistence of European and native peoples gave way to a population of large groups of African slaves and European indentured servants and wage laborers. This course will follow the tensions among colonial powers, between slaves and masters, and between colonies and metropoles through the eradication of slavery. Mr. Klooster/Offered every other year

HIST228 Early Modern Britain

This course will cover the major political, economic, cultural, social, religious and intellectual developments in Britain from rise of the Tudor dynasty in the 15th century through the 18th century, at which time the British Empire dominated world politics. We will pay particular attention to the emergence of modern monarchy, the Protestant Reformations, the English Civil War, the Financial Revolution, and the beginnings of empire. We will examine how the four nations of England, Scotland, Wales and Ireland came to be Britain and how a

British identity emerged. We will also examine the relationships between major events and shifts in English society and culture, including the changing roles of women, the increasing dominance of the middle class and its affect on elite society and culture. Ms. Kushner/ Offered periodically

HIST229 WOMEN IN EUROPEAN HISTORY/LECTURE, DISCUSSION
Examine the history of European women up to 1800. Topics will include premodern ideas about women and gender; women's role in relationship to religion; women's work; women's position within the household; comparisons between rural and urban women, and among elite, middle-class and peasant women; the effect of marital status on single, married and widowed women; the effects of major historical changes such as the Reformation and the rise of capitalism on women; and the emergence of movements for women's rights. Ms. Kushner/ Offered periodically

HIST230 ARMENIAN GENOCIDE/SEMINAR
Examines the various dimensions of the Armenian genocide, through scholarly analyses, survivor narratives, journalistic accounts and other resources. Through the course, students develop a detailed understanding of the actual events of the genocide, its social and political causes, and its immediate and long-term impact on individual Armenians and the Armenian nation generally. Students will also treat in-depth the initial external response to the genocide, its political and legal aftermath, and the significant effort still made by the Turkish successor state to deny that the genocide occurred. Mr. Payaslian/Offered periodically

HIST231 AMERICA IN THE GILDED AGE, 1877–1900/PROSEMINAR
Focuses on a volatile period of American history, the Gilded Age, 1877 to the turn of the century. Examines Gilded Age society, culture, economy and politics. Includes immigration and urbanization, industry and labor relations, family life and agrarian movements.
Ms. Greenwood/ Offered periodically

HIST232 FINDING THE SUBJECT: COMPARATIVE HISTORIES OF PROSTITUTION/SEMINAR
This seminar will examine prostitution in a variety of places and times. These include medieval, early modern and modern Europe; the United States, Argentina, Russia and China in the 19th century; ancient Rome; and 20th-century Kenya. The goal is twofold. The first is to study how historians find prostitutes in the historical record and what sorts of questions they consequently ask of their evidence. The point is to better understand the ways in which historians can access and make claims about subjects who usually have no voice of their own. The second goal is to pursue a selective, comparative, global history of prostitution. We will endeavor to see the ways in which prostitution was organized, what it meant to those who participated in it, and how it was perceived by those who did not. We will attempt to understand why prostitution, which never engaged more than a fraction of any population at any given time, managed to take on such a fundamental importance in the shaping of ideas about the state, family, women, sexuality, modernity, youth and power. Ms. Kushner/Offered periodically

HIST233 CONFUCIANISM, DAOISM, BUDDHISM: INTELLECTUAL HISTORY OF CHINA/LECTURE, DISCUSSION
Explores the three major intellectual traditions of China, with special emphasis on the ethical values of each tradition and their historical and contemporary relevance. Fulfills the Values Perspective.
Mr. Ropp/Offered every year

HIST234 RACIAL THOUGHT AND BODY POLITICS IN MODERN EUROPE (1500-2000)/SEMINAR
The category of "race" has been used since about 1500–when Europe's Renaissance met with the exploration of "other" human beings in different continents–to naturalize inequality among groups of people based on certain ideas of their bodies. The seminar focuses on the scientific foundation of modern racism in the Enlightenment, the origins of the cult of health and beauty at about 1900, and the globalization of western body ideals until now. Mr. Kuehne/Offered periodically

HIST235 THE ATLANTIC WORLD/LECTURE, DISCUSSION
A course that deliberately moves away from the traditional focus on nation-states and continents, concentrating instead on the Atlantic world that was created in the wake of the Portuguese explorations and Columbus' voyages. The emphasis will be on the flow of people, commodities, germs and ideas between the Old World (Europe and Africa) and the New. Mr. Klooster/Offered every year

HIST236 GENDER, WAR AND GENOCIDE IN 20TH CENTURY EUROPE/SEMINAR
The purpose of this course is to investigate the different and often hidden ways gender images and gender regimes shaped the radicalization of mass violence in Germany and Europe in the first half of the 20th century and Europe's conversion to peace from 1945 on. A related question is how these gender images and gender regimes were itself shaped by war and genocide. The course covers WWI and WWII, national differences of war memories, the feminization of the Holocaust, the rise of a peace culture in Europe since the 1980s, and the return of genocide to Europe in former Yugoslavia in the 1990s. Special attention will be paid to various approaches to gender history, such as the analysis of discourses and images, or the analysis of gender practices. We will attempt to do this by critical analysis of scholarly work, written testimonies, literature, films, and propaganda materials. Mr. Kuehne/Offered periodically

HIST237 THE HOLOCAUST PERPETRATORS
This course explores the main parts of the German and Central European society that committed the Holocaust, that is the desktop perpetrators like Adolf Eichmann, the physicians who carried used Jews for medical experiments, the concentration-camps guards, and the killing units as the hard core of the SS elite, but also "ordinary" Germans and soldiers who served in police battalions or in the drafted army, on women who served as guards or as part of the occupational regime, and not least on non-German collaborators or volunteers. The course focuses on the interrelation of individual and biographical backgrounds, mental and ideological orientations, and social and institutional arrangements: What are the reasons that made "normal" humans become mass murderers? Mr. Kuehne/Offered biannually

HIST239 U.S. CONSTITUTIONAL LAW: CIVIL LIBERTIES/LECTURE, DISCUSSION
See Government and International Relations 272.

HIST240 U.S. CONSTITUTIONAL LAW: GOVERNMENTAL POWERS/ LECTURE, DISCUSSION
See Government and International Relations 273.

HIST241 HISTORY OF INTERNATIONAL HUMAN RIGHTS/LECTURE, DISCUSSION
This course will introduce the student to one of the most fundamental issues in the evolution of societies: human rights. Examines the various conceptions of personal rights since the ancient times. Issues related to the promotion and protection of human rights as premised on the fundamental principles of basic human dignity and individual rights are explored. Examines also the emergence of domestic human rights and

the relationship between just society and political legitimacy. Mr. Payaslian/Offered periodically

HIST242 History of Nationalism/Lecture, Discussion

Reviews the history of nationalism from the Enlightenment to the French Revolution and the Napoleonic Wars, the rise of nationalism in the 19th century, national integration, right-wing nationalism, and nationalism between the First World War and the Second World War, the liberations movements in the 20th century and the revival of nationalism in the late-20th-century. It pays special attention to the role of ethnicity and religion, the hostilities generated by the more virulent forms of nationalism, the destructive consequences of such movements for ethnic and religious communities and the phenomenon of genocide. Mr. Payaslian/Offered every other year

HIST243 American Antiquarian Society Seminar in American Studies/Seminar

Given at the American Antiquarian Society (about two miles from Clark); students conduct original research in the society's unique holdings. Students apply in the spring through Professor Neuman, English Dept. Offered every year

HIST247 The Western Powers and the Armenian Genocide

This course is a seminar on the Western responses to the Armenian genocide. It surveys problems in international responses to genocides within a comparative perspective, and examines the diplomacy of the Western powers toward the Ottoman Empire and the internationalization of the Armenian Question, followed by the events leading to the Armenian genocide. This course analyzes the instruments and conduct of Western diplomacy – for example, the United States, Great Britain and Germany – within the context of international geopolitical considerations and the world political economy, as well as their domestic politics as determining their responses to the Armenian genocide. Finally, the course evaluates the Western responses to Armenian demands for international recognition, and to the Turkish denial of the Armenian genocide. We conclude by assessing the extent to which the Western powers can facilitate Armenian-Turkish reconciliation. Mr. Payaslian/Offered periodically

HIST248 History of the Middle East/Seminar

Introduces students to one of the most critical regions of the world – the Middle East. Examines the different legacies from the past. Looks at the role of outside powers and their impact of modernization and economic development and the problems associated with nation-building and state-building. Examines the nature and causes of the various conflicts in the region, especially the Israeli-Palestinian conflict and the role of international organizations and the prospects for conflict resolution. The course is concluded by reviewing some of the major events in recent years (i.e The Gulf War, 9/11), as well as efforts toward greater regional cooperation. Mr. Payaslian/Offered periodically

HIST252 The British Empire/Lecture, Discussion

Reviews the evolution of the British Empire from the 18th century to the 1960s and 1970s. Four major topics are examined: the rise of the British Empire and key elements contributing to imperial expansion: the American Revolution and its impact on British colonial policy; British imperial expansion in Africa and Asia and problems of colonial administration and stability; and evolution from empire to commonwealth. Mr. Payaslian/Offered periodically

HIST253 20th-Century Europe/Lecture, Discussion

Deals with Europe in the 20th century and focuses on some of the key social, political and cultural developments in what turned out to be the most disturbing chapter in Europe's long history. Staff/Offered every year

HIST254 The Age of Atlantic Revolutions/Seminar

The half-century after 1776 was a period marked by the violent pursuit of political liberty and economic opportunity on both sides of the Atlantic. In North America, the Thirteen Colonies were transformed into the United States of America informed by an Enlightenment ideology of rationalism, secularism and democracy, which had long been cultivated in Europe. Tapping the same sources, the French rebels soon saw their revolution degenerate into a bloody spectacle. Another consequence of the French Revolution was the rebellion in the Caribbean colony of St. Domingue, in the course of which slavery was abolished and independence achieved. Mr. Klooster/Offered every other year

HIST256 Russian Politics

See Government and International Relations 256.

HIST260 Rescue and Resistance During the Holocaust/Seminar

Investigates rescue and resistance activities during the second World War. Our aim will be to come to a critical understanding of what we mean by "rescue" and "resistance," and to analyze how these undertakings were organized, who participated in them and why people felt compelled to do so. Looks at the role and function (if any) of age, gender, degree of religious observance, political affiliation and social class in our attempts to understand not only what activities were undertaken, but the motivation for such actions. Ms. Dwork/Offered periodically

HIST261 Jewish Children in Nazi-Occupied Europe/Seminar

Jewish children had many different types of living experiences during the war years. The purpose of this course is to study the lives of European Jewish children during and after the occupation years. Studying the youngest and most vulnerable members of society, students will learn about the children themselves and about the adults who framed and shaped their lives. Ms. Dwork/Offered periodically

HIST262 Jews and Christians in the Ancient World

See Classics 262.

HIST265 Life and Death in the City: Occupied Europe, 1939-1945/Seminar

Examines the daily lives of ordinary people — gentile and Jewish — in the cities of occupied Europe during WWII. Ms. Dwork, Ms. Pritchard/Offered periodically

HIST266 Refugees/Seminar

The aim of this course will be to investigate and analyze the history of the "Refugee Question" in Europe and America, and to explore the impact of these international and national debates on the lives of the asylum seekers. Ms. Dwork/Offered periodically

HIST267 Religious Experience in the Ancient World

See Classics 267.

HIST268 The Holocaust: Issues and Controversies/Seminar

This course explores the main scholarly and public controversies on Holocaust and Nazi War, such as the debate on Daniel Goldhagen's bestseller "Hitler's Willing Executioners" and Christopher Browning's pathbreaking book on "normal men." It examines the controversy of the role of the German "Wehrmacht" in Hitler's War of Extermination, and it asks for the role of Hitler, Himmler and regional rulers during the process that led to the "final solution." Furthermore, the course revolves around debates on social structures of the concentration camps and the interaction of perpetrators and victims. Another problem to be discussed in this course refers to the impact of gender into war and Holocaust. Not least, the course deals with debates on various representations of the Holocaust in movies ("Schindler's List," "Rosenstrasse"), as well as museums and memorials. Mr. Kuehne/ Offered periodically

HIST269 Transgression and Policing: 18th-Century Culture and Society/Seminar

In Britain and France, the 18th century was a time of momentous and uneasy transformation. Political, economic, social and scientific shifts undermined old political systems, as well as hierarchies of rank and gender. In every way, Europeans were overstepping the boundaries that had, at least in theory, defined their reality for preceding centuries. As old norms were threatened, efforts were made to carefully "police" political and social acts. Essential to this policing was the redefinition of what was considered transgressive. Using an interdisciplinary approach that will combine the study of history and literature, this course will examine the social, cultural, political and intellectual developments of 18th-century Britain and France through the lens of policing and transgression. We will explore the conditions that defined these movements as transgressive and track how forces of policing and change together created new norms. Students will read historical monographs, literature and other primary sources, which will be interpreted both as literature and as historical evidence. Prerequisite: Permission of instructors. For undergraduate English majors, this course satisfies the Period (C-2) requirement. Ms. Kasmer, Ms. Kusher/ Offered periodically

HIST273 Life Under Occupation/Seminar

Examines life under German occupation critically. The life of Jews under German occupation clearly was different than the life of their gentile neighbors, but what is equally true but not so obvious is the difference in occupation regimes across Europe. To highlight that fact and the embedded issues, the course will focus on Poland, France, Bulgaria, the Netherlands and Denmark. Particular attention will be paid to the history of France, because of the division between the north and south, and the role of Petain and Vichy. Ms. Dwork/Offered periodically

HIST281 China Rising: The People's Republic of China since 1949/ Lecture, Discussion

This course explores all aspects of Chinese life from the founding of the People's Republic of China in 1949 through the harsh reign of Mao Zedong to the reforms of Deng Xiaoping and the dramatic rise of China since the early 1980s. How did the world's largest country manage to quadruple its economy in the past 25 years? What have been the main continuities and changes in Chinese life since 1949? What are the historical implications of China's dramatic rise in terms of its society, politics, economics, international relations and the global environment? Mr.Ropp/Offered every other year

HIST282 Chinese Women in Literature and Society/Lecture, Discussion

Examines the changing role of women in Chinese society from the 17th century to the present, primarily through the reading and discussion of Chinese literature in English translation. Mr. Ropp/Offered every other year

HIST286 The Vietnam War/Lecture, Discussion

Explores the Vietnam War, emphasizing American involvement in Vietnam in the decade 1965 to 1975. Includes a survey of the history and culture of Vietnam, French experience in Vietnam, and American involvement with Vietnam from World War II to the present. Staff/Offered periodically

HIST287 Holocaust and Genocide in Comparative Perspective

See Government and International Relations 278.

HIST288 Seminar in Chinese History/Seminar

Topical research seminar in Chinese history for those with a concentration in Asian Studies. Prerequisite: either HIST080, 181 or 182; or by permission. Mr. Ropp/Offered periodically

HIST290 Political Dissent in Chinese History/Seminar

Explores traditions of political dissent in China through the entire sweep of Chinese history from the 4th century BCE to the present. Focuses on political power holders and intellectuals who in one way or another challenged their power by issuing criticisms, by protesting their policies, criticizing their characters, or by refusing to serve under them. Mr. Ropp/Offered periodically

HIST297 Honors Thesis Research

Honor students receive up to two credits for thesis research. Offered for variable credit. Staff/Offered every year

HIST299 Directed Study/Tutorial

Undergraduates, normally juniors and seniors, construct an independent study course on a topic approved and supervised by an instructor. Prerequisite: permission by instructor. Staff/Offered every year

HIST300 Readings in American Colonial History/Tutorial

See History 300.

HIST301 Studies in the Age of the American Revolution/Lecture, Discussion

HIST302 The Early American Republic/Lecture, Discussion

See History 202.

HIST304 Special Topics in U.S. History: American Social History/ Proseminar

See History 204.

HIST305 Renaissance and Reformation/Lecture, Discussion

See History 205.

HIST306 Africans in the Americas, 1500-1888/Lecture, Discussion

See History 206.

HIST307 Explorations in History: Rural New England in the 19th Century

See History 207.

HIST309 U.S. History Since World War II/Lecture, Discussion

See History 209.

HIST310 Research Seminar in 19th-Century American History/Seminar

See History 210.

HIST311 American Consumer Culture/Seminar

See History 211.

HIST312 History of Sexuality: 1750 to the Present/Lecture, Discussion
See History 212.

HIST313 Gender and the City in the United States/Seminar
See History 213.

HIST314 The American Civil War/Lecture, Discussion
See History 214.

HIST315 The Age of Lincoln/Proseminar
See History 215.

HIST316 African American Internationalism/Proseminar
See History 216.

HIST317 Reconstruction: America after the Civil War, 1865-1877/Seminar
See History 217.

HIST319 History of American Women/Lecture, Discussion
See History 219.

HIST321 African American History to 1865/Lecture, Discussion
See History 221.

HIST322 History of the South/Lecture, Discussion
See History 222.

HIST323 The Civil Rights Movement/Lecture, Discussion
See History 223.

HIST326 Comparative Colonialism/Seminar
See History 226.

HIST327 The Caribbean in the Era of Slavery, 1492-1886/ Lecture, Discussion
See History 227.

HIST328 Early Modern Britain
See History 228.

HIST329 Women in European History/Lecture, Discussion
See History 229.

HIST330 Armenian Genocide/Seminar
See History 230.

HIST331 America in the Gilded Age, 1877–1900/ Proseminar
See History 231.

HIST332 Finding the Subject: Comparative Histories of Prostitution/Seminar
See History 232.

HIST335 The Atlantic World/Lecture, Discussion
See History 235.

HIST336 Gender, War and Genocide in 20th-Century Europe/Seminar
See History 236.

HIST337 The Holocaust Perpetrators
See History 237.

HIST341 History of International Human Rights/Lecture, Discussion
See History 241.

HIST342 History of Nationalism/Lecture, Discussion
See History 242.

HIST343 American Antiquarian Society Seminar in American Studies/Seminar
See History 243.

HIST347 The Western Powers and the Armenian Genocide
See History 247.

HIST348 History of the Middle East/Seminar
See History 248.

HIST352 The British Empire/Lecture, Discussion
See History 252.

HIST353 20th-Century Europe/Lecture, Discussion
See History 253.

HIST354 The Age of Atlantic Revolutions/Seminar
See History 254.

HIST357 Jewish Children in Nazi-Occupied Europe/Seminar
See History 261.

HIST360 Rescue and Resistance During the Holocaust/Seminar
See History 260.

HIST365 Life and Death in the City: Occupied Europe, 1939-1945/Seminar
See History 265.

HIST366 Refugees/Seminar
See History 266.

HIST368 The Holocaust: Issues and Controversies/Seminar
See History 268.

HIST383 Studies in Chinese History/Tutorial
Independent Studies. Offered For Variable Credit. Mr. Ropp

HIST386 The Vietnam War/Lecture, Discussion
See History 286.

HIST392 Thesis Research
Universitywide course number reserved for this research. Variable Credit. Staff

HIST394 Graduate Research Symposium
Universitywide course number reserved for this type of course.

HIST397 Master's Thesis
Universitywide course number reserved for work on the Master's thesis. Variable Credit. Staff

HIST398 Doctoral Dissertation
Universitywide course number reserved for doctoral dissertation work. Variable Credit. Staff

HIST399 Graduate Readings
Offered for variable credit. Staff

INNOVATION AND ENTREPRENEURSHIP

Program Overview

This exciting new minor is open to all students in any major. The minor consists of six courses designed to provide students an opportunity to merge their passion with an ability to make that passion economically sustainable as they plan their careers. The mission of this program is to provide a set of rigorous entrepreneurial experiences for undergraduate liberal arts and science students, shaping graduates who are economically literate, and have explored and participated in the process of starting something new. The required courses dramatically broaden awareness of the opportunities after graduation, allowing students to be better prepared to take responsibility for their own professional and economic destiny. For additional information, please contact the GSOM Program Administrator at (508)793-7744.

Innovation and Entrepreneurship Minor

The Innovation and Entrepreneurship Minor requires six courses. Students must have a cumulative GPA of 2.0 in the minor courses to complete the minor. It is recommended that students declare this minor by the end of their sophomore year. It should be noted that the capstone course ENT265 is required of all minors; a secondary capstone ENT266 is offered for those whose projects are deemed launchable by the program director.

Required Courses:

ENT100 The Art and Science of Management (offered every semester)
ENT202 Entrepreneurial Communication and Influence (offered every semester)
ENT210 Management and Behavioral Principles (offered every fall, recommended JR/SR level)
ENT215 The Art of the New – Entrepreneurship (offered every semester)
ENT265 Entrepreneurship Capstone Project, Seminar I (offered every fall) Required - 1 Unit
ENT266 Entrepreneurship Capstone Project, Seminar II (offered every spring) Optional - 1 Unit

One Elective (preapproved by program director)

The elective should substantially support a student's capstone project. The elective may not count toward a student's major or any other minor or concentration.

Courses

ENT100 The Art and Science of Management
See Management 100.

ENT202 Entrepreneurial Communication and Influence
The goal of this course is to explore the role of persuasion and influence (rhetoric) as practiced in early stage entrepreneurial organizations, both in for-profit and non-profit organizations. Creating and communicating a compelling vision is arguably a critical life skill. Entrepreneurs must be able to effectively communicate their vision to a wide variety of audiences. Moreover, in today's marketplace, entrepreneurs must be prepared to communicate in persuasive ways on a global scale. Through intensive classroom work, role-playing, and real-world applications, students will explore and participate in transactional, relational, solution, and value-added persuasion. Staff/Offered every semester

ENT210 Management and Behavioral Principles/Lecture, Discussion
See Management 210.

ENT215 The Art of the New - Entrepreneurship/Lecture, Discussion
See Management 215.

ENT245 Social Entrepreneurship
See Management 245.

ENT265 Entrepreneurship Capstone Project/Seminar I
Every student who elects the minor, or the track in the Innovation and Entrepreneurship Program will be expected to complete a "project" before graduation. Projects may be done by an individual student, or as a member of a team. This element of the program will promote idea generation, team formation and project management skills, primary and secondary research, market analysis and industry mapping. This course is required for all innovation and entrepreneurship minors or tracks. Offered every fall, 1 unit.

ENT266 Entrepreneurship Capstone Project, Seminar II
Students who plan to execute the project formulated in ENT265 should plan to take the second seminar, 266. Students may work as individuals or in a group. Students will be expected to have made connections (as appropriate for the project) with suppliers, distributors, subcontractors, and legal advisers. Exploration of legacy projects will be covered and students will be required to create a final report that documents their plans for or execution of the project launch. This course is optional for innovation and entrepreneurship minors or tracks. Offered every spring, 1 unit.

INTERNATIONAL DEVELOPMENT, COMMUNITY AND ENVIRONMENT

The International Development, Community and Environment Department (IDCE) offers two undergraduate programs and four graduate programs. The undergraduate programs in International Development and Social Change and Environmental Science and Policy (a track in the Environmental Science major) both offer an accelerated B.A./M.A. degree. In addition, the graduate program in Community Development and Planning offers an accelerated B.A./M.A. degree to qualified Clark students. The graduate programs include:

- International Development and Social Change
- Community Development and Planning
- Geographic Information Sciences for Development and Environment
- Environmental Science and Policy

The IDCE Department stresses an interdisciplinary approach linking geography, anthropology, the environmental sciences, economics, government and history. Divisions between disciplines are crossed as students take advantage of courses in the different programs. They develop a multidimensional perspective that is critical to tackling the complex challenges of sustainability, community building and policy making.

For more information, visit the IDCE Web pages at www.clarku.edu/departments/idce.

Program Faculty

Kiran Asher, Ph.D.
David Bell, Ed.D.
Jude Fernando, Ph.D.
William Fisher, Ph.D.
Ellen Foley, Ph.D.
Liza Grandia, Ph.D.
Heidi Larson, Ph.D.
Kenneth MacLean, Ph.D.

Adjunct Faculty

Parminder Bhachu, Ph.D.
Joseph de Rivera, Ph.D.
Jody Emel, Ph.D.
Odile Ferly, Ph.D.
Jacqueline Geoghegan, Ph.D.
Beverly C. Grier, Ph.D.
Amy Ickowitz, Ph.D.
Douglas Johnson, Ph.D.
Laurence A. Lewis, Ph.D.
James T. Murphy, Ph.D.
Richard Peet, Ph.D.
Paul W. Posner, Ph.D.
Dianne Rocheleau, Ph.D.
Paul Ropp, Ph.D.
Srinivasan Sitaraman, Ph.D.
Valerie Sperling, Ph.D.
B. L. Turner, Ph.D.
Kristen Williams, Ph.D.

Affiliate Faculty

Donna Hicks, Ph.D.

Research Faculty

Cynthia Enloe, Ph.D.
Richard Ford, Ph.D.
Barbara Thomas-Slayter, Ph.D.

Program Overview

In the international development and social change program, students learn from people who are actively engaged in vital world issues, for example, globalization, nationalism, displacement of indigenous people in India, food scarcity in Ethiopia, black social movements in Colombia, and social justice and education in South Africa. The program begins by building a foundation to help students to understand and think critically about the social, political, economic and cultural dynamics shaping the world. Courses provide important insights on how the developed and developing worlds are linked historically and at present. Clark University is one of the few universities in the nation to offer a liberal-arts major in international development.

Beyond the classroom—in workshops, panels, and informal gatherings—international development and social change majors learn from faculty, as well as from undergraduate and graduate students, with field experience from around the world. Students have the opportunity to expand this knowledge with hands-on experience through internships and field research.

As a major in this program, you will be part of a diverse student body and discover a program that offers intellectual excitement, insightful perspectives and stimulating ideas. International development students explore strategic political action by developing an awareness of the complexities and contradictions of global power relations. You will learn the history of social change around the world from professors who have been involved in social change in Asia, South America and Africa. Students in this major become thinkers and doers who are prepared to tackle the challenges of development in the 21st century.

Undergraduate Requirements

The undergraduate program in international development and social change stresses creative, cross-disciplinary approaches to development. The major requires 14 units, including five core courses, four courses in an area of specialization to deepen students' understanding of a particular theme or issue in international development, three methods and skills courses, one internship or directed research project, and a capstone seminar to be taken in the spring semester of the senior year.

1. **Core Courses (5 units):** Students are required to take ID125 Tales from the Far Side: Development and Underdevelopment, a course in development economics, and three additional core courses (one each) in politics of development, resource management and socio-cultural issues.
2. **Area of Specialization (4 units):** With approval of their advisers, students select a specialization — such as community-based development, political economy, conflict and development, culture and development, resource management, gender and development, GIS or self-designed. Students must take a minimum of two of these courses at the 200-level.
3. **Methods and Skills courses (3 units):** Students are also required to take one course in social-science research methods and two courses from the following: computer science, cultural anthropology, cartography, statistics, GIS, conflict negotiation, or a foreign language at the intermediate level.
4. **Internship or Field Research (1 unit):** Students are required to complete a one-credit internship or field research related to international development. You may combine this requirement with a study-abroad program.
5. **Capstone Seminar (1 unit) or Honors Thesis (2 units):** Taken fall term of senior year, students explore advanced topics in international development.

Grading for the Majors

The lowest acceptable grade for all international development courses in order for it to count toward the major is a C–. Students may not take any international development major courses for Pass/No Record. The internship is the only exception. Students may take internship credits on a CR/NC basis. To take an internship for a letter grade, a student must petition the Dean of the College.

The Double Major

Many students double major in international development and social change and related disciplines, such as economics, geography, government and international relations, psychology and sociology. A major in international development and a minor in one of the related programs, such women's studies, is another popular option. (Please note: You may count up to two courses toward both majors.)

Honors Program

The honors program in international development and social change provides advanced students with an opportunity to carry out independent research on an issue of his or her interest. To graduate with honors, you must conduct and successfully complete a two-semester independent honors thesis or project on a topic of relevance in the field of international development.

The honors program is required for students wishing to apply to the international development and social change B.A./M.A. program and is open to juniors who:

1) have a minimum grade-point average of 3.25 overall and 3.5 in the international development major by the end of the first semester of the junior year; and
2) demonstrate that they are able to undertake independent research on a topic relevant to the major.

If you wish to be admitted to the honor's program in international development, but do not meet the above eligibility criteria, you may petition the director of the IDCE Department.

International Development and Social Change Minor

This minor consists of six courses, four of which focus on a development theme identified by the student and approved by his/her adviser. The six include one introductory course (ID120, ID125 or ID131), two 100-level courses, two 200-level courses, and one skills course from among those accepted for the international development and social change major. No more than two courses can be an internship or directed study. They will be assessed for equivalence to the 100- or 200-level courses.

Accelerated Degree Program

International Development and Social Change offers an accelerated B.A./Master's degree program to eligible students. For more information, visit www.clarku.edu/accelerate.

Courses

BIOL201 Ecology of Atlantic Shores/Lecture, Field Trip
See Biology 201.

ECON128 Intro to Economic Development/Lecture, Discussion
See Economics 128.

ECON177 Japanese and Chinese Economies/Lecture, Discussion
See Economics 177.

ECON247 Economics of Population/Lecture, Discussion
See Economics 247.

EN120 Discovering Environmental Science/Lecture, Discussion
See Environmental Science 120.

EN171 International Perspectives on Environmental Problems and Policies/Lecture, Discussion
See Environmental Science 171.

EN207 Climate Change, Energy and Development
See Environmental Science 207.

EN240 Energy and the Environment
See Environmental Science 240.

EN265 Risk Analysis: Policy and Methods/1/2 credit/ seven week module
See Environmental Science 265.

GEOG237 Feminism, Nature and Culture/Seminar
See Geography 237.

GEOG247 Intermediate Quantitative Methods in Geography/ Lecture, Laboratory
See Geography 247.

GEOG255 Qualitative Research Methods, Skills and Applications/ Lecture, Discussion
See Geography 310.

GEOG256 Global Economic Geographies/Seminar
See Geography 256.

GEOG263 The Climate System and Global Environmental Change/ Lecture, Discussion
See Geography 263.

GEOG271 Groundwater Hydrology and Management/ Lecture, Discussion
See Geography 271.

GEOG281 Tropical Ecology/Lecture, Discussion
See Geography 281.

GEOG370 Animal Agriculture/Lecture, Discussion
See Geography 370.

GOVT090 Political Science Fiction/First-Year Seminar
See Government and International Relations 090.

GOVT103 Africa and the World/Lecture, Discussion
See Government and International Relations 103.

GOVT177 Transitions to Democracy/Lecture, Discussion
See Government and International Relations 177.

GOVT208 Comparative Politics of Women/Lecture, Discussion
See Government and International Relations 208.

GOVT218 Child Labor Globalization/Seminar
See Government and International Relations 218.

GOVT227 Global Politics of Development/Lecture, Discussion
See Government and International Relations 227.

GOVT240 Human Rights and International Politics/ Lecture, Discussion
See Government and International Relations 240.

GOVT289 Advanced Topics in International Relations/Seminar
See Government and International Relations 289.

HIST077 Introduction to Latin American Civilization/Lecture, Discussion
See History 077.

HIST084 Japanese Civilization/Lecture, Discussion
See History 084.

HIST179 The History of Traditional Africa/Lecture, Discussion
See History 179.

HIST180 History of Modern Africa/Lecture, Discussion
See History 180.

HIST181 Chinese Civilization/Lecture, Discussion
See History 181.

HIST182 Modern China/Lecture, Discussion
See History 182.

HIST184 Modern Japan/Lecture, Discussion
See History 184.

HIST272 ADVANCED TOPICS ON LATIN AMERICA: MANY MEXICOS/ RESEARCH SEMINAR
See History 272.

HIST281 CHINA RISING: THE PEOPLE'S REPUBLIC OF CHINA SINCE 1949/ LECTURE, DISCUSSION
See History 281.

HIST282 CHINESE WOMEN IN LITERATURE AND SOCIETY/ LECTURE, DISCUSSION
See History 282.

HIST288 SEMINAR IN CHINESE HISTORY/SEMINAR
See History 288.

ID011 MAKING A DIFFERENCE/FIRST-YEAR SEMINAR
This course will offer a scholarly perspective on "making a difference," with two emphases: youth involvement in social change, and the university-partnership approach to community development. Themes of personal growth, leadership, collaboration and activism will be explored. Students will learn how to make a difference at various levels: in their lives, on the Clark campus and in the city of Worcester. This is a multidisciplinary course in which readings will be derived from the fields of sociology, psychology, community development, urban studies, education, social policy and political science. In addition to reflection papers and discussions, students will complete interviews with community leaders, take leadership roles in on-campus activities, and have a community placement in the Main South or Piedmont neighborhood. The concluding assignment will be a proposal for a summer Making a Difference project, or another community-based social change activity. Fulfills the Values Perspective. Ms. Ross, Ms. Boyle/Offered fall semester

ID016 INTRODUCTION TO ECONOMIC GEOGRAPHY/LECTURE, DISCUSSION
See Geography 016.

ID052 GLOBAL CHANGE, REGIONAL CHALLENGES
See Geography 052.

ID069 INTRODUCTION TO INTERNATIONAL RELATIONS/LECTURE, DISCUSSION
See Government and International Relations 069.

ID070 INTRODUCTION TO COMPARATIVE POLITICS/LECTURE, DISCUSSION
See Government and International Relations 070.

ID087 INTRODUCTION TO ENVIRONMENTAL INFORMATION SYSTEMS/ LECTURE, LABORATORY
See Geography 087.

ID101 INTRODUCTION TO PEACE STUDIES/LECTURE
See Peace Studies 101.

ID107 MIRACLES OF ASIA: ECONOMIC GROWTH IN GLOBAL CONTEXTS/ LECTURE, DISCUSSION
See Geography 107.

ID109 INTERNATIONAL ECONOMICS: TRADE AND FINANCE/LECTURE, DISCUSSION
See Economics 108.

ID110 INTRODUCTION TO QUANTITATIVE METHODS /LECTURE, LABORATORY
Introduces the most standard methods of statistical analysis, which are essential for serious research. Considers data sampling and descriptive and inferential statistical techniques for analyzing geographic data. Includes graphic techniques, tests of hypotheses and regression. Students use computer spreadsheets for statistical analysis. No prior exposure to statistics is assumed. The course is one for which graduate students may receive credit. A skills course for geography majors. Fulfills the Formal Analysis requirement. Mr. Pontius, Staff/Offered every year

ID112 LEADING ISSUES IN SUSTAINABLE DEVELOPMENT
This course explores the connections between the theory and practice of sustainable development. It draws from political economics, political ecology and human geography. The course also highlights the issues of power and the obstacles they present to the achievement of the objectives of sustainable development. Mr. Fernando/Offered every year

ID117 REVOLUTION AND POLITICAL VIOLENCE/LECTURE, DISCUSSION
See Government and International Relations 117.

ID120 INTRODUCTION TO CULTURAL ANTHROPOLOGY/LECTURE, DISCUSSION
The purpose of this course is to provide students with a rich anthropological understanding of "culture." What does it mean to be human across our many differences and similarities? How do people give meaning to their lives across time and space? How are some of the most intimate features of our lives socially patterned? Students will learn to see the familiar in the strange and the strange in the familiar—in other words, to appreciate something about other cultures and, through this mirror, to learn something new about their own. The class also provides an introduction to anthropological history, ethnographic method and social theory. From the U.S suburbs to hunter-gatherers in the Amazon, students will explore the diversity of human societies around the world through the lens of critical issues such as development, power, identity, war, globalization, inequality and cultural survival in the 21st century. Through class assignments, students will also have the opportunity to use tools of anthropological observation and problem-solving. Throughout the semester, we will discuss the politics and practicality of applying anthropological knowledge for a more just world. Ms. Grandia

ID125 TALES FROM THE FAR SIDE: DEVELOPMENT AND UNDERDEVELOPMENT/ LECTURE, DISCUSSION
Discussions of geopolitics invariably refer to the problems of Third World (under)development. What is so compelling about the idea of development? Why does it ail much of the so-called Third World? What are some of the solutions to development dilemmas—neoliberal market reforms or attention to women, ethnic groups and other heretofore marginal issues such as the environment? Or is the development enterprise fundamentally flawed as some postcolonial scholars claim? This course introduces students to key histories, concepts and debates in international development through critical and analytical engagements with fiction, films and theoretical literatures on the subject. Ms. Asher/Offered every year

ID126 LIVING IN THE MATERIAL WORLD: THE POLITICAL GEOGRAPHY OF RESOURCE DEVELOPMENT/LECTURE, DISCUSSION
See Geography 126.

ID127 POLITICAL ECONOMY OF DEVELOPMENT/LECTURE
See Geography 127.

ID131 LOCAL ACTION, GLOBAL CHANGE/LECTURE, DISCUSSION
Introduces students to activism in a broad sense: as both a tool for political action and a mechanism for social and/or economic change. International and community development are discussed as forms of activism. Texts focus on activism not only as it is understood and practiced in the United States, but also as it is found in other parts of the world. This includes grassroots movements against the establishment of dams in India and transnational networking of environmental,

women's-rights and human-rights activists. In addition, globalization is considered from an activist perspective—both positive and negative approaches to globalization are examined. Religious-based terrorism is also considered as a form of extreme activism, which is in many ways a reaction to perceived injustice, oppression and lack of alternatives. Students participate in a project at the community or wider level in order to learn about how activism works practically. Students will experience first-hand the opportunities and challenges to affecting change, protecting human rights or raising public awareness. Mr. Bell/Offered every year

ID132 Research Methods for International Development and Social Change

This course examines the value of ethnographic forms of research and knowledge production, its conceits, as well as its limits. While other genres of research design and methods will be considered, the primary focus will be upon qualitative ones, including participatory techniques developed by field practitioners. Special emphasis will be placed upon cultivating a critical stance towards these methods, the cultural assumptions that underlie them, and the impact that relations of power have upon the research process as a whole. Towards this end, assignments (including a mini-ethnography) are designed to help students: 1) design their own research project; 2) select methods that are appropriate to it; 3) gain the intellectual flexibility and confidence to make adjustments as necessary in "the field"; and 4) to reflect upon the interpersonal dynamics of the research process during the write-up phase of their project. Mr. MacLean

ID133 Law and Culture

The course provides an ethnographic perspective into the interaction of law with the cultural and economic realms of social life. It explores legal institutions in their particular cultural contexts, aiming at cross-cultural comparisons and contrasts. The course examines classical and contemporary anthropological theories of the nature of law and the processes of disputing and negotiation. Ethnographic case studies of credit and debt management, property rights, and other contractual arrangements in non-Western societies illustrate the theoretical discussion. The case materials explore the innovative ways of employing local initiative in the livelihoods of the marginal and oppressed in many parts of the world. The focus is on the construction of law through culture, power and individual agency, at local as well as transnational levels of legal processes. Offered periodically

ID136 Sub-Saharan Africa: Issues and Problems/Lecture, Discussion

See Government and International Relations 136.

ID137 Race and Ethnicity Across Borders: Comparing the Local and Global

See Sociology 137.

ID138 Gender and Environment/Lecture, Discussion

See Geography 136.

ID140 Francophone Literature and Film

See French 140.

ID155 The Economics of Natural Resources and the Environment/Lecture

See Economics 157.

ID160 Health and Disease in Developing World

What are the challenges to promoting and maintaining health in the developing world? Are health problems in developing countries mainly economic, cultural, political or medical? This course will employ anthropological perspectives on health and international development to explore contemporary issues in global health policy and health-care delivery in the developing world. By examining the global economic and political context of health, students will analyze the role that economic development plays in promoting or undermining health in various setting. Students will examine key health challenges such as infectious diseases, HIV/AIDS, malnutrition and hunger, and reproductive health. The course will address how health is an issue of development, equity and human rights, and how populations in the developing world are attempting to cope with disease. Ms. Foley/Offered every year

ID161 Global Cultures and Identities/Lecture, Discussion

See Sociology 160.

ID170 Ecology and Economy in the Tropics/Lecture, Discussion

In the ecological conditions of the tropics, how can we reduce hunger and improve economic conditions sustainably? Examines how economic management in tropical ecosystems interacts with cultural history, natural resources, economic theory, and international institutions. Classroom discussions focus on readings, while each student may focus on a topic of individual interest in course projects. Mr. Pontius/Offered periodically

ID172 Islands in the Stream: Puerto Rico and the French Antilles

See Comparative Literature 174.

ID173 Introduction to Latin American Politics/Lecture, Discussion

See Government and International Relations 173.

ID174 Globalization, Environment and Justice/Lecture, Discussion, First-Year Seminar (in alternate years)

See Geography 179.

ID176 Comparative Economic Systems/Lecture, Discussion

Examines a variety of developed market economies and transitional and developing economies. Topics include Japan's industrial policy and business groups, Germany's social market economy and codetermination, Sweden's welfare state and labor unions, economic reforms in China and Russia and economic development in Korea. Prerequisite: ECON010. Mr. Hsu/Offered every year

ID182 Are We Modern Yet?/First-Year Seminar

This seminar asks what it means for places and peoples to be modern. We begin by exploring when and where the imperative toward modernity began. The class examines the economic, political and cultural dimensions of modernity. We question the Eurocentric ideas that claim that modernity was a western enterprise exported to the rest of the world. Next colonialism, nationalism and Third World development are examined as specific projects of modernity. Examples from Latin America and the Caribbean will help focus the discussions for this section. Finally, we engage current debates about the projects of modernity and ask: Have modern forms of knowledge and institutions borne out their promise? Or is modernity in crisis? Are we moving toward a postmodern era? Throughout the seminar we will highlight how certain notions of race and gender shaped ideas about modernity. Students in the International Studies Stream will be given first preference to enroll in this seminar. Others will be admitted if spaces remain. Fulfills the Historical Perspective. Corequisite: IDND066 Global Society. Ms. Asher/Offered every other year

ID184 Nomads to Oil Sheikhs: The New Geography of the Middle East/Lecture, Seminar

See Geography 184.

ID186 SOUTH AFRICA: HISTORY AND CONTEMPORARY POLITICS/ LECTURE, DISCUSSION

See Government and International Relations 178.

ID190 RASTER GIS/LECTURE, LABORATORY

Introduces GIS as a data management, analysis and mapping tool. Topics include GIS data structure and management, geodesy and map projections, techniques for raster and spatial database development. Laboratory exercises concentrate on applying concepts presented in lectures using IDRISI software. While students gain a working knowledge of software application, the focus of the course is on analytical concepts that are fundamental for any spatial analysis using any GIS software. Although the course is computer oriented, no programming is involved. Graduate students may receive credit for this course. Fulfills the Formal Analysis requirement. Counts as skills course or core course in mapping sciences/spatial analysis in geography major. Staff/Offered every semester

ID192 POLITICAL ECONOMY OF ASIA

See Government and International Relations 192.

ID202 THE HIV/AIDS CRISIS IN AFRICA

See Government and International Relations 201.

ID203 PROGRAM EVALUATION FOR YOUTH AND COMMUNITY DEVELOPMENT INITIATIVES

See International Development and Social Change 237.

ID204 INTERNATIONAL AND COMPARATIVE ANALYSIS OF COMMUNITY DEVELOPMENT

Cities and communities have become more interconnected through global networks of production and information, blurring the boundaries between the so-called First and Third Worlds. Pockets of extreme poverty are found in the wealthiest cities, and pockets of luxurious housing are found in the poorest cities. Similar development challenges take place across international boundaries, such as the inability to house growing populations, proliferation of global consumption fueled by international media, or scarce water resources. In this context of increasing global interaction and similar development challenges, communities have developed distinct places based on their local institutional and economic resources. This course explores how communities are created and transformed through specific case studies from the Americas, Asia and Europe. It includes discussions on urban space in an era of information technology, major community-development trends and planning approaches. This course seeks to provide (1) general knowledge on the social processes that shape spatial patterns and (2) practical tools for the analysis of communities as intersections of multiple social processes. Fulfills the Global Comparative Perspective. Ms. Chion/Offered every year

ID205 RISKS AND RUMOR IN GLOBAL HEALTH

This course will look into different dimensions of risk in global health, including the role of rumors, which can be a consequence or catalyst of unsafe health behaviors. In some situations, rumors can have a positive role, lending information on outbreaks, or conveying appropriate caution. Risk will be considered at a number of levels from external risks such as natural disasters, terrorism, epidemics and disease vectors to individual risks such as risk-taking behavior around sexual and reproductive health. Vulnerability will also be examined as a factor which puts some communities and individuals more at risk for negative health outcomes than others. Rumor and the power of "word of mouth" in spreading positive as well as negative information on health will be looked at. Rumor and word of mouth will also be investigated as a means to mobilize communities to demand or reject public-health initiatives. While there are a number of newer risks facing global health, challenges and misperceptions are not new to public-health initiatives. The course will start by taking a look at historical obstacles to public-health initiatives such as early rejection of the smallpox vaccination campaigns. The course will examine of a number of case studies where health projects or initiatives did not go "as planned"; often situations where risks were not adequately considered and prepared for in the planning. Students will investigate what went wrong and what measures could have been taken to better anticipate or prevent the unexpected outcome. The northern Nigeria boycott of the Global Polio Eradication Initiative will be one of the cases that will be studied. Ms. Larson/Offered periodically

ID206 PEASANTS, RURAL DEVELOPMENT AND AGRARIAN CHANGE

Throughout history, outsiders have long tried to "fix" the peasantry—stereotyping them from poor and plodding to cunning and rebellious. Who are these ambiguous rural folk? And what is wrong with them? As the course will show, debates about the category of "peasants" often reflect deeper questions about the nature of capitalism, colonialism, the nation-state, rural development, and even modernity itself. The course begins with foundational texts in anthropology and political economy attempting to define "peasants" and the unique logic of their "moral economy." Later thematic topics include: gender and farm labor; the Green Revolution and the environment; rebellions and revolts; indigeneity; the commons and commodification; agricultural policy and transnational trade; land reform; NGO mobilization; "local food" and back-to-the-land movements. As an interdisciplinary seminar, students will have the opportunity to read ethnographies, histories, and socioeconomic analyses with a broad geographic scope. We will also discuss how all these academic debates influence rural development policy and practice. Ms. Grandia

ID207 THE MEDICINE WHEEL: HEALTH, ILLNESS AND WELLNESS IN GLOBAL PERSPECTIVE

This course examines the cultural and social dimensions of health systems, disease, wellness, and physical and mental illness, both in traditional/rural communities and in complex/urban social settings. Healing alternatives, other healing traditions (shamanism, faith-healers), the role of placebos, health beliefs, and the cultural conflicts between clients and health-care specialists are examined, both in the United States and abroad. Grassroots and popular public-health efforts in international and local development settings are explored. Concepts of holistic health that look at health/wellness systems for a community are contrasted with sectoral approaches that look at one specific health area. Because this medical anthropology perspective explores the culture of professional medical practice, as well as the illness and healing concepts and practices of diverse other cultures, this course is ideal for students pursuing medical and health professions. Offered periodically

ID209 BEYOND VICTIMS AND GUARDIAN ANGELS: THIRD WORLD WOMEN, GENDER AND DEVELOPMENT/SEMINAR

How did Third World women and gender concerns enter economic-development discourses? How have Third World women and gender been conceptualized within development practices? In turn, how have feminist theories about women and gender shaped economic development discourses? In exploring these issues this graduate seminar will eschew the divide between theory and praxis that plagues development literature. Ms. Asher/Offered every year

ID210 INTERNATIONAL COOPERATION
See Government and International Relations 211.

ID211 AFRICAN ENVIRONMENTS AND GEOGRAPHICAL IMPLICATIONS/ LECTURE, DISCUSSION
See Geography 211.

ID213 LATIN AMERICAN POLITICS/LECTURE, DISCUSSION
An introduction and overview of the key economic and political issues confronting Latin America today: economic development and social inequality, international debt, the breakdown of democracies as well as transitions from authoritarian rule, revolutions, and the role of working-class, women's, peasant and ethnic movements. We will draw on the analytical perspectives of political economy and cultural politics to develop a nuanced and self-reflexive understanding of the complex realities of Latin American politics. Ms. Asher/Offered periodically

ID214 APPLYING ANTHROPOLOGY: FROM FIELD WORK TO ACTION
This course introduces the field of applied anthropology and exposes students to what practicing anthropologists do, at home and abroad, including the areas of community development, health, agriculture, education, law and human rights, gender, microeconomics, advocacy, policy, language and culture. It explores how concepts in anthropology translate into action, and how an anthropological perspective on development is not only critical of its past, but insightful about its future. Much of the specific case material examined will be associated with areas in Latin America and the U.S.-Mexico border, where the instructor has worked, and the course will serve as excellent preparation for students planning to do field work. (1/2 unit, second half Spring) Offered every year

ID215 COMPARATIVE ENVIRONMENTAL POLITICS/LECTURE, DISCUSSION
See Government and International Relations 216.

ID217 INTERNATIONAL POLITICAL ECONOMY
See Government and International Relations 226.

ID218 SEMINAR IN PHYSICAL ENVIRONMENT AND DEVELOPMENT/SEMINAR
See Geography 218.

ID219 POLITICS AND DEVELOPMENT IN SOUTHERN AFRICA/SEMINAR
See Government and International Relations 219.

ID221 EDUCATION AND DEVELOPMENT/SEMINAR
Education (formal, nonformal and informal) has played a strategic role in shaping society over the past century, and continues to inform development at the community, national and international levels. This course examines the historical evolution of education and explores its continued local and global relationship to the process of international and community development. Mr. Bell/Offered every year

ID222 ECONOMY AND ENVIRONMENT/LECTURE, DISCUSSION
See Geography 224.

ID225 POLITICAL ECONOMY, GEOGRAPHY AND CULTURE IN SOUTH ASIA: A SURVEY
South Asia represents one-sixth of the global population and is amongst the poorest regions of the world. It is a region that encompasses Afghanistan, Pakistan, India, Bangladesh, Sri Lanka, Nepal, Bhutan and Maldives. This course is an interdisciplinary introduction to the field of South Asian studies. It explores a broad range of issues in the light of the physical, economic, cultural and political diversity of South Asia since the late-colonial period to the present. Some of these issues are economic development, state formation, popular culture, religion, interstate and intrastate conflicts, systems of social stratification, security, civil society and social movements, and arms race and terrorism. It will also examine the role of extraregional actors (Russia, China, and United States) in relation to these issues. The emphasis will not just be on understanding South Asia for its own sake, but also to think about its role in the processes of globalization. Mr. Fernando

ID228 ECONOMIC DEVELOPMENT/LECTURE, DISCUSSION
See Economics 228.

ID229 MANAGEMENT OF ARID LANDS/LECTURE, SEMINAR
See Geography 228.

ID230 AFRICA'S DEVELOPMENT IN GLOBAL CONTEXT
See Geography 274.

ID231 LANDSCAPE ECOLOGY/LECTURE, DISCUSSION
See Geography 232.

ID234 THE AGE OF ATLANTIC REVOLUTIONS/SEMINAR
See History 254.

ID235 LATINO AND LATIN AMERICAN DEVELOPMENT ALTERNATIVES/SEMINAR
Examines a diverse landscape of community and regional/national development ideas and cases, drawn from Latin America and "Latino" areas of the United States, exemplified by the border region with Mexico. Using original field work, the course defines basic anthropological principles of equitable and effective community development, addressing the social, ecological, agricultural, political, gender, economic, educational, health cultural and relational/follow-through concerns. Case studies and other research provide the foundation to practice evaluative exposition and critique in the classroom and on paper. Term projects engage current development themes: sustainability/control; negotiating planning/action; information flows; social capitalism; public health/ecohealth; women as change agents; responses to displacement; dialogic and "co-authorized" community development; political ecology; intercultural communication; space/place; and managing knowledge funds. Possible opportunities for field sites in Latin America/Latino-U.S. developments, based on the course. Offered periodically

ID236 THE ATLANTIC WORLD/LECTURE, DISCUSSION
See History 235.

ID237 PROGRAM EVALUATION FOR YOUTH AND COMMUNITY-DEVELOPMENT INITIATIVES
This course provides students with skills required to apply research methods to the assessment of youth and community-development programs. By gaining exposure to the various types of program evaluation (e.g. process evaluation, impact evaluation, empowerment evaluation, etc.), analyzing evaluation case studies, and working on an actual evaluation of a program. Students will leave this class with an understanding of the importance of and challenges involved in conducting high quality program evaluations. Students will gain enough skill to assist in the development and implementation of evaluations. Ms. Ross/Offered every other year

ID238 INTERNET GEOGRAPHY: SOCIOECONOMIC IMPACTS OF INFORMATION TECHNOLOGIES/LECTURE, DISCUSSION
See Geography 257.

ID239 COUNTRY AND CULTURE/LECTURE, DISCUSSION
See Geography 239.

ID243 SEEING LIKE A HUMANITARIAN AGENCY

Since World War II, several different but overlapping regimes have emerged to help structure humanitarian responses to large-scale forms of displacement. In what ways do these evolving regimes enable humanitarian agencies to "see," and in what ways does their particular field of vision differ from that of states, academics, policymakers and the displaced themselves? What kinds of blind-spots (theoretical, methodological, and ethical) inevitably result? This seminar will explore these questions from three different vantage points, each composing one part of the course as a whole. Part one will provide an overview of the literature and the main concepts of the course. Special attention is focused on the ways scholars and policymakers have historically constructed displacement as a "problem" either for analysis or action, and how these concerns have shifted over the past three decades. Part two will consist of ethnographic studies of humanitarian interventions in different geographic settings, which will highlight the relevance (and limits) of concepts and methods drawn from the social sciences, including anthropology. Part three will address some of the opportunities and dilemmas humanitarian emergencies present for those who wish to study or to manage them. Mr. MacLean

ID245 CULTURE, POLITICS AND INTERNATIONAL DEVELOPMENT/ LECTURE, DISCUSSION

Examines the interplay of culture and politics with international-development practices in an era of increasing globalization. Designed to encourage students to explore recent insights into the workings of discourse and power, and to examine how we can relate, in both theory and practice, these insights to processes of development and resistance to development in the Third World. Considers specific cases and historical processes to understand the effects on local communities of specific development interventions. Mr. Fisher/Offered periodically

ID249 THE FRENCH-SPEAKING WORLD/LECTURE, DISCUSSION

An interdisciplinary analysis of questions of cultural identity as they have been elaborated by Francophone writers during the colonial and particularly the postcolonial period, with special emphasis on French-speaking Africa, the Antilles and the Maghreb. Through literature, social texts and film, we explore such issues as tradition and modernity; conflicts between (and within) indigenous and French social codes; the Algerian war and its legacy; women and Islam. Prerequisite: two French courses above 130 or permission. Ms. Kaufmann/Offered periodically

ID251 NONGOVERNMENT ORGANIZATIONS: CATALYSTS FOR DEVELOPMENT/SEMINAR

See International Development and Social Change 251.

ID253 SOCIAL MOVEMENTS, GLOBALIZATION AND THE STATE/ LECTURE, DISCUSSION

The emergence of global networks or transnational alliances among local, regional and national social movements, international nongovernmental organizations and advocacy groups has been one of the most politically influential aspects of globalization. This course examines what is new about contemporary social movements, the nature of their transnational alliances, and their potential to transform the way states and citizens relate to one another and to the international political arena. The contested nature of civil society, the uneven influence of globalization processes, and changes in the contexts within which local communities and grassroots groups operate are explored through studies of movements concerned with the environment, human rights, development and women. Mr. Fisher/Offered every other year

ID254 INTER-AMERICAN RELATIONS/SEMINAR

See Government and International Relations 290.

ID256 STRUGGLE AGAINST POVERTY/LECTURE, DISCUSSION

Considers worldwide definitions of poverty, recent trends, causes and effectiveness of different approaches to ameliorate poverty. The course will examine poverty and inequality in a North-South context, taking into account the complex political and cultural issues and perceptions of poverty and wealth around the world. As a final project, each student will prepare a proposal, policy or project designed to alleviate poverty in a specific setting. Staff/Offered periodically

ID259 RELIGION, IDENTITY AND VIOLENCE IN A GLOBALIZING WORLD/ LECTURE, DISCUSSION

Examines the nature of religion and the interconnections among religious identity, political violence, and globalization in the contemporary world. It will examine conflicts that arise between groups with different religious identities as well as conflicts between religions and secularization. It will consider how globalization has failed to satisfy so many people in the world, why religion has been raised as an alternative, and why the religious rejection of secularization has been so violent. Mr. Fisher/Offered periodically

ID260 QUANTITATIVE MODELING/LECTURE DISCUSSION

Investigates the quantitative and qualitative potential of using mathematical computer models to guide policy in human/environment systems. Students learn to think with a systems perspective while translating their own conceptual models to mathematical models to computer models. Includes lab sessions in the computer room and lectures/discussion in the classroom. Culminates in written and verbal presentations of student projects. Students will gain technical proficiency in Excel and other software designed for sustainability analysis. Prerequisites are MATH121 or MATH125 or graduate standing or permission. Mr. Pontius/Offered every year

ID261 ROOTS AND ROUTES: IMMIGRANTS, DIASPORAS AND TRAVEL/ LECTURE, DISCUSSION

See Sociology 260.

ID262 FAMINE AND FOOD SECURITY/SEMINAR

Access to food is a vital concern not only for many poor countries, but also for poor sections of wealthier nations. Food insecurity is a major obstacle to development throughout the world and can lead to environmental degradation, high morbidity, political instability and conflict. Famine, a condition of severe food insecurity, is often the result of a complicated mix of natural and human-generated factors. This class will consider famine and food (in)security from anthropological, sociological, political and economic perspectives. Case studies will include Africa, Asia and Western countries. The relation between food security and development efforts as the bridge between famine relief and development work, which promotes sustainable food security, will be considered. Offered periodically

ID263 GLOBAL AIDS: THE PANDEMIC IN COMPARATIVE PERSPECTIVE/SEMINAR

See Government and International Relations 283.

ID264 ADVANCED TOPICS IN DEVELOPMENT THEORY

This seminar provides students with an opportunity to engage in detailed in-depth study of some classical theorists of modernity and development. It aims to establish firm theoretical and textual foundations for the future study of politics, economics, culture and social relations related to Third World development. Topics vary. The theme of the Fall 2004 seminar was "Conversations with the Ghost of Marx." Open to undergraduates with permission. Staff/Offered periodically

ID266 Principals of Negotiation and Mediation: An Overview of Conflict Resolution Approaches

Offers an overview of the principles of conflict resolution that can be applied internationally as well as interpersonally. A general framework for the understanding of conflict is presented that includes: power-, needs-, interest-, and relationship-based conceptualizations of conflict resolution. Gives students a theoretical as well as practical experience of conflict. It explores some of the psychological obstacles that impede the resolution process and engages in a number of experiential exercises that help the student develop the interpersonal skills needed to transform conflict relationships. ID266 offered every year, fall semester; ID366 offered every year, spring semester/Ms. Hicks

ID268 Global Ethnographies: Ethnographers in the Making for the 21st Century/Seminar

See Sociology 294.

ID269 Raced Nature, Gendered Developments: The Political Economy of Environmental Conservation/Seminar

Concerns about the environment and "local" needs appear central in diverse disciplinary, discursive and organizational realms across the globe. This reading-intensive interdisciplinary seminar will explore the complex and contradictory connections between economic development, the environment and the needs of "local" peoples. The following questions will frame the seminar discussions: (1) how, why and when did concerns about the "global" environment get linked to economic development? (2) how are "local" peoples shaped by, and shape, these interactions? (3) How do the interconnected discourses of environment and development reconfigure or reinforce existing power relations (especially those that are "raced" and "gendered")? Open to undergraduate students with permission only. Ms. Asher/Offered periodically

ID271 Digital Image Processing/Lecture, Laboratory

Introduces basic concepts and analytical methods of satellite remote sensing as applied to environmental systems (e.g. land-cover classification, vegetation monitoring, etc) Emphasizes processing and analysis of digital satellite images, especially Landsat, SPOT, and AVHRR data, for classification of land cover, land-cove/land-use change analysis, and other geographic topics. Final project is required for the completion of this course. Prerequisite: GEOG190/GEOG390/ID190/IDCE310 Raster GIS. Ms. Ogneva-Himmelberger/Offered every year

ID273 Advanced Remote Sensing/Lecture, Laboratory

See Geography 282.

ID275 Gender, Politics and Development in Africa/Seminar

See Government and International Relations 275.

ID276 Spatial Database Development

Examines the procedures and technologies used for spatial database development in support of Geographic Information Systems (GIS). Topics covered include sustainable database design, database import/export/update programming, advanced vector analysis, internet mapping trends and GIS-related business process modeling. Staff/Offered every year

ID276 Spacial Database Development

Examines the procedures and technologies used for spatial database development in support of Geographic Information Systems (GIS). Topics covered include sustainable database design, database import/export/update programming, advanced vector analysis, internet mapping trends and GIS-related business process modeling. Staff/Offered every year

ID277 Gender, Environment and Development/Seminar

See Geography 277.

ID279 20th-Century Latin America/Proseminar

See History 275.

ID280 Urban Ecology: Cities as Ecosystems/Lecture, Discussion

See Geography 280.

ID284 Environment and Development in the Middle East and North Africa/Lecture, Discussion

See Geography 284.

ID285 Gender and Global Change/Lecture, Discussion

Explores gender as a variable shaping people's roles, responsibilities, obligations and opportunities across cultures and nations, with particular attention to Third World societies; analyzes transformations taking place in gender roles, relations, et al, in the process of globalization; and clarifies approaches and identifies tools for socioeconomic and gender analysis in the context of participatory research and community empowerment. The course focuses on theoretical questions and policy issues, explores methods of gender analysis for research and considers gender-sensitive strategies for alleviating poverty, generating income and empowering disadvantaged social groups. Staff/Offered every other year

ID286 Advanced Topics in Comparative Politics/Seminar

See Government and International Relations 286.

ID287 Politics and Power in Third World Societies/Lecture, Discussion

Examines the evolving nation-state in the Third World, connections between colonialism and Third World political patterns, interaction between politics and internal economic and social forces, as well as the political impact of ideologies. Analyzes the politics of such groups as the landless, urban poor and women; as well as ethnic, religious, clan or caste groups. Examines patron-client relations, political parties, self-help associations and peasant mass movements for their roles in socioeconomic and political change. Staff/Offered periodically

ID289 Development Policy/Seminar

See Geography 289.

ID290 Senior Capstone Seminar

Designed to provide senior international development and social change majors and students entering the B.A./M.A. program the opportunity to apply their undergraduate training to some of the main contemporary and cutting-edge themes in international development, as well as prepare them for further work (either advanced study or entry to the job market) in international development. Themes studied include globalization as it relates to international development, refugees and forced migration, human rights, environmental protection, implications for development of the spread of religious-based extremism, food security, foreign policy and humanitarian aid. Staff/Offered every year

ID294 Participation and Environmental Management/Lecture, Discussion

Focuses on community-based participation as a means to plan and implement sustainable practices. Examples of local resource user systems are investigated to evaluate how practices of individual managers in the Third World—farmers, herders, fishermen—impact the environment. Staff/Offered every year

ID295 Altered States/Seminar

See Government and International Relations 295.

ID296 Vector GIS/Lecture, Laboratory

Introduces important principles and concepts of GIS with hands-on experience in vector GIS software, ArGIS. Develops familiarity with the program and its application for spatial database development, spatial analysis, data visualization and mapping. Laboratory exercises, include GIS applications in local government, environmental justice, urban and environmental planning, public health and census data analysis. Provides field training with Global Positioning System (GPS) receivers and introduces online mapping tools. Ms. Ogneva-Himmelberger/Offered every semester

ID297 Honors Thesis

Staff/Offered every semester

ID298 Internship

Contact the International Development, Community and Environment office for internship proposal forms. Staff/Offered every year

ID299 Directed Study

Students design an independent research course in conjunction with a professor. Staff/Offered every year

SOC232 Population, Environment and Development/Variable Format

See Sociology 232.

SOC250 Culture, Consumption and Class in Local and Global Contexts/Lecture, Discussion

See Sociology 250.

SOC255 The Creation of Nationalism, Nationalist Cultures and Symbols/Lecture, Discussion

See Sociology 255.

SOC285 Social Policy, Immigration and Poverty/Seminar

See Sociology 285.

SOC288 Globalization: Fashion and Foul Play/Seminar

See Sociology 288.

About IDCE Graduate Programs

The IDCE graduate programs address one of the greatest challenges of the 21st century: sustaining environmental resources while promoting development. To encourage local and national initiatives, IDCE programs present macro- and micro-level perspectives to build a realistic understanding of development in this era of globalization. Using tools designed specifically to strengthen partnerships, organize information, mobilize resources, monitor environmental trends, and adapt to change, IDCE graduates advance this meaningful work.

This unique approach builds ownership on local levels and fosters alliances among researchers, community groups, governments and nongovernmental organizations. The resulting partnerships encourage collaborative responses to some of development's most complex problems. Building on 30 years of field experience in North America, Africa, Asia and Latin America, IDCE promotes a more just, equitable and sustainable future through the pursuit of four goals:

1) Understanding power relationships
2) Building community
3) Sustaining the environment
4) Adapting tools for social change

IDCE explores alternative approaches to overseas and domestic development through five key concepts:

- combining theory and practice
- stressing analytical skills
- focusing on the sustainability transition
- creating partnerships
- linking local and global perspectives.

Student-Faculty Research

In their collaborative research projects, students and faculty build upon IDCE's interdisciplinary approach to issues of environment and development. Recent student-faculty projects include land-use analysis for the Blackstone River Watershed, EPA-supported research on vulnerability to mercury exposure, resettlement evaluation for USAID in Ethiopia, greenhouse-gas emission inventory for the City of Worcester, and assessment of impacts of the Talo Dam in Mali for cultural survival.

Sponsored Student Research

In recent years, IDCE students have been awarded prestigious fellowships to pursue innovative research. These have included Fulbright Fellowships, David L. Boren Fellowships, Mickey Leland International Hunger Fellowships, Catholic Relief Services Fellowships, Compton Mentor Fellowships, Compton Environment and Sustained Development Fellowships, and the E7 Sustainable Energy Scholarship. Others have received Presidential Management Fellowships.

Program Requirements

Each of IDCE's four graduate programs in International Development and Social Change, Community Development and Planning; Geographic Information Sciences for Development and Environment; and Environmental Science and Policy requires a minimum of 12 graduate course units. These include five required core courses, two skills courses, and five elective courses in the student's field of specialization.

Core courses form a solid foundation, skills develop a tool-kit for fieldwork, and electives give flexibility to develop expertise in one area of specialization. The programs culminate in a final project, research paper or critical review paper.

Program Faculty

Miriam Chion, Ph.D.
Laurie Ross, Ph.D.
Mark Tigan, Ph.D.

Adjunct Faculty

Charles Agosta, Ph.D.
Yuko Aoyama, Ph.D.
John Baker, Ph.D.
Parminder Bhachu, Ph.D.
Joseph de Rivera, Ph.D.
J. Ronald Eastman, Ph.D.
Jody Emel, Ph.D.
Susan Foster, Ph.D.
Jacqueline Geoghegan, Ph.D.
Dominic Golding, Ph.D.
Beverly C. Grier, Ph.D.
Susan Hanson, Ph.D.
Amy Ickowitz, Ph.D.
Douglas Johnson, Ph.D.
Sharon Krefetz, Ph.D.
Laurence A. Lewis, Ph.D.
Todd Livdahl, Ph.D.
Deborah Martin, Ph.D.
Richard Peet, Ph.D.
Colin Polsky, Ph.D.
Paul W. Posner, Ph.D.
Dianne Rocheleau, Ph.D.
John Rogan, Ph.D.
Paul Ropp, Ph.D.
Robert Ross, Ph.D.
Joseph Sarkis, Ph.D.
Srinivasan Sitaraman, Ph.D.
B. L. Turner, Ph.D.
Kristen Williams, Ph.D.

Affiliate Faculty

Lois Bruinooge, J.D.
Donna Hicks, Ph.D.

Research Faculty

Cynthia Enloe, Ph.D.
Richard Ford, Ph.D.
Barbara Thomas-Slayter, Ph.D.

Program Overview

The community development and planning program provides current and up-and-coming community-development practitioners with a strong foundation—based on theory, skill development and practice—to take on the challenges of urban neighborhood revitalization in the United States.

Through course work, field research and internships, this program enables students to better understand the complex linkages between local action and processes of policy making at local, state and national levels. Students learn to critically examine the roles and effectiveness of informal neighborhood organizations, banks, private developers, local nonprofits and government agencies in community development. Graduates gain the expertise to channel private and public community-development funds and programs to address local needs.

Students in this program benefit from a unique interdisciplinary approach to community development that integrates the perspectives and ideas of the other IDCE programs: environmental science and policy, geographical information systems for development and environment, and international development and social change.

The community development and planning program offers core courses and hands-on skill development in critical areas such as community development and planning theory, community-development finance, community-development decision making, nonprofit management, conflict mediation, youth and community development, geographic information systems, and research and project-evaluation methods.

In addition, students participate in field research and internships that allow them to learn directly from neighborhood residents and community-based organizations about their needs, resources, and priorities and how to best mobilize local action to improve neighborhood quality of life.

See www.clarku.edu/departments/idce/cp for details about the community development and planning program.

Requirements

The master's degree in community development and planning requires a minimum of 12 graduate course units. These include five core courses in community development, two skills courses, and five elective courses related to the student's particular interests. An internship with a community organization to provide training in practical skills is strongly recommended. This program culminates with a final research paper or consultancy project.

Required Core Courses (5)

IDCE314 Research Design and Methods
IDCE344 Community Development and Planning Theory
IDCE346 Practicum in Community Development and Planning
IDCE30218 Community Development Decision Making and Negotiation
IDCE30289 Community Development Finance

Skills Courses (A sampling; select two)

GEOG360 Quantitative Modeling
IDCE325 Data Mining Community Profiles
IDCE310 Introduction to GIS
IDCE331 Risk Analysis and Management
IDCE332 Environmental and Social Impacts Assessment (ESIA)
IDCE334 Planning and Zoning for Community Developers
IDCE335 Strategies for Community Organizing
IDCE30240 Community Planning Studio
IDCE30225 Grant Writing for Community Developers
IDCE357 Research Seminar in Dynamic Environmental Modeling
IDCE363 Decision Methods for Environmental Management and Policy
IDCE366 Principles of Conflict Negotiation and Mediation
IDCE388 GIS and Local Planning

- IDCE395 Participation and Environmental Management
- IDCE396 Advanced Topics in GIS
- IDCE30211 Field Research in Youth Development and High-School Transformation
- IDCE30212 Introduction to Computer and Quantitative Methods
- IDCE30292 Participatory Tools for Development, Planning and Action

Elective Courses (A sampling; select five)

- GEOG354 Urban Transportation: Problems and Prospects
- GEOG366 Urban Economic Geography
- IDCE304 International and Comparative Analysis of Community Development
- IDCE30250 Engaging Perspectives in Community Planning
- IDCE347 Globalization: Structure and Dynamics
- IDCE39912 Social Policy, Immigration and Poverty
- IDCE30292 Participatory Tools for Development, Planning and Action
- IDCE30293 Youth and Community Development: Theory, Policy and Practice
- IDCE30296 Nonprofit and NGO Management Issues

Research Opportunities

IDCE, the George Perkins Marsh Institute, and their partners—Worcester Youth Center, Regional Environmental Council and Family Health Center—received a prestigious award of $887,000 over four years from the National Institute of Environmental Health Sciences (NIEHS) and National Institute of Occupational Health and Safety (NIOSH). IDCE professors Timothy Downs and Laurie Ross are the principal investigators of the project, "Strengthening Vulnerable Communities in the Worcester Built Environment," which will engage community development and planning students in gathering qualitative data, including household surveys, community focus groups and ethnographic studies that capture life stories of residents. The George Perkins Marsh Institute sponsors research through its Clark Labs for Cartographic Technology and Geographic Systems and the Center for Community-Based Development (CCBD) on gender, participation and urban neighborhood planning.

Worcester Education Partnership has received an $8-million Carnegie Corporation grant to implement systemic education reform in Worcester's secondary schools. Community development and planning students are involved in the research on how high-school students experience components of the secondary-school transformation plan.

Student Opportunities for Internships and Field Research

Students in the community development and planning program have participated in internships and field research, gaining practical experience with nonprofit, grassroots and government organizations. For examples of internships, visit www.clarku.edu/departments/idce/p/index.shtml.

ENVIRONMENTAL SCIENCE AND POLICY

Program Faculty

Jennie Stephens, Ph.D. - *Coordinator*
Halina Brown, Ph.D.
Timothy Downs, D.Env.
Robert Goble, Ph.D.
Samuel Ratick, Ph.D.

Adjunct Faculty

Charles Agosta, Ph.D.
John Baker, Ph.D.
Parminder Bhachu, Ph.D.
Joseph de Rivera, Ph.D.
Patrick Derr, Ph.D.
J. Ronald Eastman, Ph.D.
Jody Emel, Ph.D.
Susan Foster, Ph.D.
Jacqueline Geoghegan, Ph.D.
Beverly C. Grier, Ph.D.
Susan Hanson, Ph.D.
Dale Hattis, Ph.D.
Amy Ickowitz, Ph.D.
Douglas Johnson, Ph.D.
Sharon Krefetz, Ph.D.
Laurence A. Lewis, Ph.D.
Todd Livdahl, Ph.D.
Deborah Martin, Ph.D.
Richard Peet, Ph.D.
Colin Polsky, Ph.D.
Paul W. Posner, Ph.D.
Dianne Rocheleau, Ph.D.
John Rogan, Ph.D.
Paul Ropp, Ph.D.
Joseph Sarkis, Ph.D.
Srinivasan Sitaraman, Ph.D.
Valerie Sperling, Ph.D.
B. L. Turner, Ph.D.
Kristen Williams, Ph.D.

Affiliate Faculty

Donna Hicks, Ph.D.

Research Faculty

Cynthia Enloe, Ph.D.
Richard Ford, Ph.D.
Barbara Thomas-Slayter, Ph.D.

Program Overview

The environmental field in the 21st century is quickly evolving to respond to complex interdependencies between the natural environment and human development. Environmental stewardship requires that we not only understand natural processes, but also how societies interact with their physical environments, how scientists and stakeholders work together to explore policy alternatives and how they apply appropriate technologies to ever-changing conditions.

Clark's innovative master's degree in environmental science and policy develops students' abilities to integrate natural and social sciences to respond to local and global challenges. This program's expertise in risk and vulnerability assessment, environmental justice, institutional dynamics, watershed stewardship, renewable energy and capacity building resonates worldwide. Current student-faculty research includes health-risk analysis, biodiversity conservation, climate-change vulnerability and adaptation, alternative transportation and impacts assessment. Classes and experiential learning give students essential skills for analysis, planning, implementation and evaluation.

As a member of a close-knit family of graduate programs, the environmental science and policy program is unique. Students are exposed to multiple perspectives and creative, integrated thinking in the classroom and in research. Hallmarks of the environmental science and policy program include:

A pioneering spirit: This program has been a leader in understanding the relationships among science, technology, environment and society for three decades. Clark is world-renowned for its work on the human dimensions of global environmental change.

Global relevance: This program covers the globe, with courses, research and field work that include the United States as well as transitional and developing countries. Environmental science and policy students gain practical skills by working on projects in the United States, Latin America, Asia, Africa and Europe.

Dynamic faculty-student research: As the smallest U.S. research university, Clark offers an elbow-to-elbow research experience with faculty members as they pursue their research on environmental sustainability the world over.

Environmental science and policy graduates are highly sought-after, cross-disciplinary professionals, able to bridge disciplines, interests and cultures to champion more sustainable futures in both developed and developing countries. They work with and between stakeholders to understand needs and priorities; design and implement solutions that are flexible, cost-effective and sustainable; and monitor performance.

Environmental career trends show that employers worldwide seek critical thinkers and doers who champion sustainable solutions that are ecologically responsible, economically rational and sociopolitically equitable. It is rare to find a professional with scientific and technical literacy, GIS capability and knowledge of what it takes to achieve effective stakeholder participation. This program trains a new kind of environmental leader for the 21st century, one who can build bridges among ideas, disciplines, stakeholders and cultures.

Visit the IDCE Web site at www.clarku.edu/departments/idce/environmental science to learn more details about the program.

Requirements

The master's degree in environmental science and policy requires a minimum of 12 graduate course units. These include four required core courses, two skills courses and five elective courses to provide breadth and depth. The electives typically focus on a topic reflecting the student's particular environmental interest. The environmental science and policy program culminates with a thesis or critical review paper, based on research participation with program faculty or approved affiliated faculty.

Required Courses (4)

IDCE363 Decision Methods for Environmental Management
IDCE382 Management of Environmental Pollutants
IDCE30287 Fundamentals of Environmental Science
IDCE30205 Climate Change, Energy and Development

Skills Courses (a sampling; choose two)

GEOG310 Qualitative Research Methods: Skills and Application
GEOG371 Groundwater Hydrology and Management
GEOG382 Advanced Remote Sensing
GEOG393 Digital Image Processing
IDCE310 Introduction to GIS
IDCE324 Computer and Quantitative Methods
IDCE332 Sustainable Development Assessment and Planning
IDCE349 Advanced Topics in Spatial Analysis
IDCE352 Technology and Environmental Assessment
IDCE357 Dynamic Environmental Modeling
IDCE366 Principles of Negotiation and Mediation
IDCE367 Quantitative Modeling
IDCE388 GIS and Local Planning
IDCE395 Participation and Environmental Management
IDCE30209 Environmental Research Design and Development (half course)
IDCE30218 Decision Making and Negotiation in Community Development
IDCE30219 Risk Analysis and Policy Methods
IDCE30290 Participatory Research Methods

Elective Courses (a sampling, choose six)

Elective courses provide students the flexibility of designing much of their course work to suit their own needs and to provide depth in a chosen area of focus. Students may take courses offered by the other three graduate programs in IDCE or in other departments, as approved by the graduate program adviser. These courses might include:

CHEM142 Environmental Chemistry
ECON157 Economics of Natural Resources
GEOG377 Gender, Environment and Development
GEOG380 Urban Ecology
GEOG381 Tropical Ecology
GEOG384 Environment and Development in the Middle East and North Africa
IDCE344 Development and Community Planning Theory
IDCE360 Development Theory
IDCE373 Social Movements, Globalization and the State
IDCE30241 Environmental Toxicology
IDCE30246 Cancer: Science and Society
IDCE30251 Limits of the Earth
IDCE30252 Corporate Environmental Management
IDCE30270 Environment, Poverty and Health (half course)
IDCE30276 Environmental Law
IDCE30288 Applied Ecology

Electives may be formal courses or directed research that supports the student's final research project.

Final Research Project

Students are required to complete either a critical review paper on a selected topic, comprising analysis, synthesis, interpretation and discussion of the literature, and significant original critical thought; or a thesis on a selected topic comprising the same elements as the paper, plus more in-depth original research and field work that contributes new knowledge. The thesis is a preferred option for those considering graduate study in a Ph.D. program once they complete the M.A.

GEOGRAPHIC INFORMATION SCIENCES FOR DEVELOPMENT AND ENVIRONMENT

Program Faculty

Yelena Ogneva-Himmelberger, Ph.D.
R. Gil Pontius, Ph.D.
Sam Ratick, Ph.D.
John Rogan, Ph.D.

Adjunct Faculty

Charles Agosta, Ph.D.
Yuko Aoyama, Ph.D.
John Baker, Ph.D.
Parminder Bhachu, Ph.D.
Lois Bruinooge, J.D.
Joseph de Rivera, Ph.D.
Patrick Derr, Ph.D.
J. Ronald Eastman, Ph.D.
Jody Emel, Ph.D.
Susan Foster, Ph.D.
Jacqueline Geoghegan, Ph.D.
Dominic Golding, Ph.D.
Beverly C. Grier, Ph.D.
Susan Hanson, Ph.D.
Dale Hattis, Ph.D.
Amy Ickowitz, Ph.D.
Douglas Johnson, Ph.D.
Sharon Krefetz, Ph.D.
Laurence A. Lewis, Ph.D.
Todd Livdahl, Ph.D.
Deborah Martin, Ph.D.
Richard Peet, Ph.D.
Colin Polsky, Ph.D.
Paul W. Posner, Ph.D.
Dianne Rocheleau, Ph.D.
Paul Ropp, Ph.D.
Joseph Sarkis, Ph.D.
Srinivasan Sitaraman, Ph.D.
Valerie Sperling, Ph.D.
B. L. Turner, Ph.D.
Kristen Williams, Ph.D.

Affiliate Faculty

Donna Hicks, Ph.D.

Research Faculty

Cynthia Enloe, Ph.D.
Richard Ford, Ph.D.
Barbara Thomas-Slayter, Ph.D.

Program Overview

The Master of Arts in Geographic Information Sciences for Development and Environment (GISDE) is designed for practitioners in development, conservation, environmental management and planning, who wish to enhance their skills and knowledge in GIS applications. Sponsored jointly by the Graduate School of Geography and the International Development, Community and Environment (IDCE) Department, the M.A. degree is equally suited for professionals entering the job market and those seeking GIS experience to strengthen their existing careers. Studies focus on applications of GIS skills to spatial analysis for development and environment in industrial and developing regions.

The program emphasizes building the intellectual breadth required to understand development issues and the technical depth required for GIS analysis. Clark is home to IDRISI, the most widely used raster GIS software in the world, so students are exposed to state-of-the-art development of software modules. The combination of GIS with IDCE's expertise in international development, environmental risk and hazards management make this master's program truly unique.

An additional benefit is a strong relationship between the program and a variety of faculty research projects. Classes and field internships create options that focus on applications of GIS to local and community planning. For example, a Clark initiative in local planning applies GIS to help the City of Worcester to revitalize brownfields.

Most GISDE students complete the program in three or four semesters. All tracks begin in August. Proficiency in general computer skills and GIS, either demonstrated in a one-week workshop in August or through Introduction to GIS in the first semester is a prerequisite.

Visit the IDCE Web site at www.clarku.edu/departments/idce/gis for details about the program.

Requirements

The master's degree in geographic information sciences for development and environment requires 12 graduate course units. These include five required core courses and seven electives. This program culminates in a project that utilizes GIS to analyze a problem in environment or development. For example, past projects have included "Opium Cultivation and Land Use Change in Northeast Myanmar," "Modeling Land Use and Nutrient Loading for the Onota Lake Watershed," and "GIS Analysis, Monitoring and Modeling of Mangroves in Ecuador."

Required Core Courses

IDCE371 DIGITAL IMAGE PROCESSING
Analyzes images from remote sensing platforms, such as satellites.

IDCE388 INTERMEDIATE GIS: VECTOR ANALYSIS
Explores applications of vector GIS.

IDCE391 GISDE PROFESSIONAL SEMINAR
Examines applications of GIS to environment and development.

IDCE394 GISDE RESEARCH SEMINAR - LAST SEMESTER
Includes data analysis and completion of the final project.

IDCE396 ADVANCED TOPICS IN GIS
Considers newest theories and applications in GIS including geodesy, change and time-series analysis, uncertainty and multicriteria decision making.

Skill Electives (such as)

IDCE314 Research Design and Methods
IDCE324 Computer and Quantitative Methods
IDCE349 Advanced Topics in Spatial Analysis
IDCE385 Research Themes in GIS

Policy Electives (at least one elective must be related to policy, such as)

- GEOG351 Resource Geography
- IDCE306 Global Economic Geographies
- IDCE311 African Environment and Geographical Implications
- IDCE343 Human Dimensions of Global Change
- IDCE356 Integrated Natural Resource Management
- IDCE 363 Decision Methods for Environmental Management and Policy
- IDCE 367 Quantitative Modeling
- IDCE 384 Environment and Development Middle East/ North Africa

Student Projects

Each student completes a project in which an aspect of GIS analysis is applied to a problem in environment and/or development. Work begins on the project in the GEOG391 seminar and continues in the GEOG394 seminar during the semester of graduation.

INTERNATIONAL DEVELOPMENT AND SOCIAL CHANGE

Program Faculty

Kiran Asher, Ph.D.
David Bell, Ed.D.
Jude Fernando, Ph.D.
William Fisher, Ph.D.
Ellen Foley, Ph.D.
Liza Grandia, Ph.D.
Heidi Larson, Ph.D.
Ken MacLean, Ph.D.

Adjunct Faculty

Parminder Bhachu, Ph.D.
Joseph de Rivera, Ph.D.
Jody Emel, Ph.D.
Odile Ferly, Ph.D.
Jacqueline Geoghegan, Ph.D.
Beverly C. Grier, Ph.D.
Amy Ickowitz, Ph.D.
Douglas Johnson, Ph.D.
Laurence A. Lewis, Ph.D.
James T. Murphy, Ph.D.
Richard Peet, Ph.D.
Paul W. Posner, Ph.D.
Dianne Rocheleau, Ph.D.
Paul Ropp, Ph.D.
Srinivasan Sitaraman, Ph.D.
Valerie Sperling, Ph.D.
B. L. Turner, Ph.D.
Kristen Williams, Ph.D.

Affiliate Faculty

John Baker, Ph.D.
Lois Bruinooge, J.D.
Donna Hicks, Ph.D.

Research Faculty

Cynthia Enloe, Ph.D.
Richard Ford, Ph.D.
Barbara Thomas-Slayter, Ph.D.

Program Overview

The master's degree in international development and social change emphasizes the connection between critical thinking and effective action. It is designed for scholars of international development, as well as for present and future practitioners of grassroots, community-based development.

Offering alternatives to centralized planning and implementation, the international development and social change master's program has been a pioneer in participatory development and a leading force to create tools for social change. The challenge for 21st-century development is to promote development and sustain environmental resources through local planning and action. The IDCE participatory approach creates ownership on local levels while fostering partnerships between local institutions and external agencies.

This master's program helps students to reach innovative solutions to development problems by building understanding of the complex causes, influences and implications of poverty, social injustice and conflict. Rooted in the belief that effective approaches merge many disciplines, the master's program in international development employs a cross-disciplinary focus, with faculty from anthropology, economics, environmental sciences, women's studies, geography, history, government and management. Links with collaborating institutions in countries such as Kenya, Nepal, Ghana, India, Senegal and Mexico provide important real-world perspectives and field work opportunities.

The international development and social change master's program has three key elements:

- Challenging conventional ideas about development and seeking innovative alternatives.
- Understanding how the interplay of power relationships gives rise to social injustice and inequity.
- Exploring the linkages between critical thinking and effective development practices at the community, regional, national and global levels.

Courses introduce alternative and traditional theories and provide practical skills to advance professional goals in development. The unique blend of theory and practice enables students to link local planning and action to policy making at different levels. The program also focuses on gender issues and social justice, bridging differences in postconflict areas, building alliances among institutions, and learning from the voices of marginalized people.

Visit the IDCE Web site at www.clarku.edu/departments/idce/id for more details about the program.

Requirements

The master's degree in international development and social change requires a minimum of 12 graduate course units. These include five required core courses, two skills courses, and five elective courses in the student's field of specialization. The international development program culminates in a final research paper.

Through action-oriented, critical studies linking theory and practice, this master's program offers opportunities to specialize in such topics as political economy, conflict and development, culture and development, resource management, community-based development, or gender and development.

Required Core Courses (5)

- Research Design and Methods – IDCE314 or IDCE305 or IDCE390 or IDCE30291 reviews topics in social research design and methodology including problem definition, research strategies, measurement, sampling, and data collection techniques and procedures.
- Development Theory – IDCE360 provides a critical overview of classical and contemporary theories of development by introducing students to writings on development. Encourages thinking historically, politically and analytically about the multiplicity of development processes and the complex relations of power that underlie them.
- Development Program and Project Management – IDCE361 Develops skills in needs assessment, project design, implementation, management, budgeting, scheduling, work plans and monitoring/evaluation.
- One Graduate-level Economics Course, such as: Economic Fundamentals for International Development – IDCE30217 focuses on applications of economics to managerial decision making and government policy. With permission of the IDCE director, this requirement can be fulfilled with another economics course offered at the graduate level.
- M.A. Final Research Paper Workshop – IDCE30123
  Seminar for second-year IDCE master's students writing their final research paper.

Skill Courses (A sampling, two required)

Skill courses include: Qualitative Research Methods; Participatory Research Methods; Introduction to GIS; Risk Analysis and Management; Environmental and Social Impacts Assessment; Principals of Conflict Negotiation and Mediation; Quantitative Modeling; GIS and Local Planning; Digital Image Processing; Risk Analysis and Policy Methods; Participation and Environment; Advanced Topics in GIS; Advanced Image Processing; Participatory Project Evaluation; and Social Analysis.

Elective Courses (five required)

Students select electives to focus their research and deepen their understanding of one of the following areas: conflict and development, culture and development, political economy, gender and development, resource management, community-based development or geographical information systems. Courses might include: Culture, Politics, and International Development; Beyond Victims and Guardian Angels: Third World Women and Gender in Economic Development; Famine and Food Security; Humanitarian Assistance in Conflict/Postconflict Contexts; Religion, Identity and Violence in a Globalizing World; Latin American Politics; Social Movements, Globalization and the State.

IDCE Graduate Courses

BIOL301 Ecology of Atlantic Shores/Lecture, Field Trip
See Biology 201.

BIOL316 Ecology/Lecture, Laboratory
See Biology 216.

BIOL317 Ecology of Infectious Disease/Seminar
See Biology 217.

GEOG337 Feminism, Nature and Culture/Seminar
See Geography 237.

GEOG343 Seminar in Human Dimensions of Global Change: Impacts and Societal Responses/Graduate Seminar
See Geography 343.

GEOG351 Seminar in Resource Geography: Theory and Method/Seminar
See Geography 351.

GEOG354 Urban Transportation: Problems and Prospects/Lecture, Discussion
See Geography 254.

GEOG355 Social Forestry, Agroecology and Development/Seminar
See Geography 355.

GEOG356 Global Economic Geographies/Seminar
See Geography 256.

GEOG366 Urban Economic Geography/Seminar
See Geography 262.

GEOG370 Animal Agriculture/Lecture, Discussion
See Geography 370.

GEOG371 Groundwater Hydrology and Management/Lecture, Discussion
See Geography 271.

GEOG384 Environment and Development in the Middle East and North Africa/Lecture, Discussion
See Geography 284.

HIST372 Advanced Topics on Latin America: Many Mexicos/Research Seminar
See History 272.

IDCE300 Social Analysis and Action—North and South/Seminar
Focuses on a critical concern for this century—the enduring inequalities that plague much of the world's population. With the scale of human poverty increasing, discrimination in all forms—whatever their basis—bear close examination. This course in social-relations analysis explores the patterns and trends creating and maintaining disadvantage; it identifies approaches to social impact assessment (SIA) and enables students to work in teams to assess the structures, processes and politics of disadvantage in a specific social system. Staff/Offered every other year

IDCE301 Research Project Development
Research skills are vital if one is to make a contribution to knowledge. This is an inherently creative process, while adhering to principles and guidelines of evidence-based "sound science." The research process is where art and science meet. This class is designed for graduate students in the environmental science and policy master's program, and emphasizes the use of interdisciplinary, multidisciplinary and transdisciplinary approaches. It has four complimentary aims: 1) helping students to

understand the research process, its components and challenges; 2) introducing specific methods and techniques—qualitative, quantitative and mixed—and practicing them in the field; 3) visiting and conversing with practicing researchers from a diversity of institutions (e.g. Woods Hole Marine Biological Laboratory, Harvard Forest, Harvard School of Public Health and others); and 4) getting students well on track with their own individual research projects (papers or theses), with production of working documents that serve as the student's research plan and fill-in key sections on introduction, problem statement, research questions, literature, methods and expected results. Mr. Downs/Offered every spring

IDCE303 Culture, Consumption and Class in Local and Global Contexts/Lecture, Discussion
See Sociology 250.

IDCE304 International and Comparative Analysis of Community Development
See International Development and Social Change 204.

IDCE305 Qualitative Research Methods, Skills and Applications/ Lecture, Discussion
See Geography 310.

IDCE307 The Medicine Wheel: Health, Illness and Wellness in Global Perspective
See International Development and Social Change 207.

IDCE308 Comparative Politics of Women/Lecture, Discussion
See Government and International Relations 208.

IDCE309 Roots and Routes: Immigrants, Diasporas and Travel/ Lecture, Discussion
See Sociology 260.

IDCE310 Raster GIS/Lecture, Laboratory
See International Development and Social Change 190.

IDCE311 African Environments and Geographical Implications/ Lecture, Discussion
See Geography 211.

IDCE312 Famine and Food Security/Seminar
See International Development and Social Change 262.

IDCE313 Latin American Politics/Lecture, Discussion
See International Development and Social Change 213.

IDCE314 Research Design and Methods/Graduate Seminar
See Geography 314.

IDCE319 Politics and Development in Southern Africa/Seminar
See Government and International Relations 219.

IDCE320 Child Labor Globalization/Seminar
See Government and International Relations 218.

IDCE321 The French-Speaking World/Lecture, Discussion
See International Development and Social Change 249.

IDCE325 Data Mining Community Profiles/7-week module, 1/2 credit
This is a series of practical exercises in acquiring and manipulating data, mainly from the U.S. census online, in order to create a profile of a city or neighborhood. Income, poverty and linguistic isolation are examples. The course does not assume or use probability statistics, but it does make heavy use of spreadsheets and arithmetic. Student will take away templates that will allow them to perform profiles anywhere they go. Reading load is light; Internet and spreadsheet computer work is moderately heavy. Mr. Ross/Offered periodically

IDCE326 Global Politics of Development/Lecture, Discussion
See Government and International Relations 227.

IDCE328 Economic Development/Lecture, Discussion
See Economics 228.

IDCE329 Management of Arid Lands/Lecture, Seminar
See Geography 228.

IDCE330 Human-Environment/Nature-Society Science and Study/Seminar
See Geography 330.

IDCE331 Risk Analysis and Management
Draws together disparate theories and methods for risk analysis of health, environmental and technological problems. Includes dose-response calculations, exposure assessment, modeling, fault-tree analysis, uncertainty and risk communication. Covers intermediate statistics, Monte Carlo methods and forecast evaluation. Developed and developing country case studies will be compared. Mr. Downs/Offered periodically

IDCE332 Sustainable Development Assessment and Planning
How can we assess the tradeoffs – economic, social, political, cultural and ecological – among alternative development pathways and choices in order to promote more sustainable development? We discuss how 21st-century impact assessment needs to evolve into a multistakeholder sustainability assessment process, how that can be done, its challenges and barriers. The course explains and compares existing developed and developing country methods of impact assessment. Beginning with the U.S. context in Part 1, we explain the fundamentals of impact studies, including laws, basic documents, and agency and public involvement in the assessment process. We cover impacts on land resources, economy, air quality, water resources, health, historic resources, wetlands, wildlife, as well as social and cultural impacts. An emphasis is placed on which indicators of impact to use for each category, and how to measure them. In Part 2, turning to developing country contexts, we discuss appropriate methodologies and capacity-building needs. Case studies are used extensively for discussion. The course has a major group project dimension, with students working in teams to critically review current practice for typical development projects (e.g. wind farms, landfills, mining projects and dams) and making arguments for how it should be improved.

IDCE333 Population, Environment and Development/Variable Format
See Sociology 232.

IDCE334 Planning and Zoning for Community Developers
This course introduces students to the history, theories and principles of urban and regional planning. It explores planning tools, such as comprehensive planning and zoning, and their implications for the management of public resources. Staff/Offered every year

IDCE335 Strategies for Community Organizing/7-week module, 1/2 credit
The objectives and strategies of community organizers in the United States since the early-20th century are reviewed, from Hull House to Alinsky to faith-based organizing. The course concludes with a discussion on whether globalization makes a difference or whether community organizing does. When possible, discussions with regional veterans will be part of the course. Reading load is moderate. Mr. Ross/Offered periodically

IDCE337 Culture, Politics, and International Development/Lecture, Discussion
See International Development and Social Change 245.

IDCE339 Country and Culture/Lecture, Discussion
See Geography 239.

IDCE340 Human Rights and International Politics/Lecture, Discussion
See Government and International Relations 240.

IDCE341 Management of NGO Organization

IDCE343 Seminar in Human Dimensions of Global Change: Impacts and Societal Responses/Graduate Seminar
See Geography 343.

IDCE344 Community Development and Planning Theory/Seminar
Explores the various theories, debates and strategies regarding the development of urban communities. Students analyze and critique traditional and emerging community-development frameworks, strategies and tools. Local community-development practitioners present a field perspective. Required for community development and planning program. Ms. Ross/Offered every year

IDCE346 Practicum in Community Development and Planning
Engages students to work as a team on a critical community-development project. Students gain skills in field research, applied qualitative and quantitative data analysis, multidisciplinary teamwork, negotiation with clients, and writing professional reports. Practicum clients and topics have included a project with the Worcester Public Schools to involve public-school students in urban secondary-school reform and work with the City of Worcester and two community-development corporations on assessing the economic impact of housing production in low-income neighborhoods. Ms. Ross/Offered every year

IDCE352 Technology and Environmental Assessment Seminar
A survey of analytic techniques used in evaluating environmental conditions and the impacts of technology. These techniques consist of formal methods such as cost-benefit, risk-benefit, cost effectiveness and decision analysis. They also include methods used to elicit human judgement and behavioral responses in evaluating complex environmental and technical systems. Draws on case studies and teaches students to make both quantitative and qualitative assessments. Mr. Ratick/Offered every year

IDCE353 International Political Ecology/Lecture, Discussion
See Geography 353.

IDCE354 Beyond Victims and Guardian Angels: Third World Women, Gender and Development/Seminar
See International Development and Social Change 209.

IDCE357 Research Seminar in Dynamic Environmental Modeling
See Environmental Science 256.

IDCE358 Advanced Topics for ID: International Feminist Thinking
In this seminar we will be investigating ideas that have come out of five different women's movements — from Egypt, Argentina, Nicaragua, Burma — and form feminist efforts at building international alliances. Many discussions of "feminist theory" concentrate chiefly on ideas crafted within formal university settings. These ideas, of course, have been very valuable. But in this seminar, women working within movements organized to empower women, assert women's rights and improve women's material conditions. Moreover, each of the five movements we will explore has been self-consciously international. Even if they have focused on the conditions of women and the privileging of masculinity in their own country, these acitivists have drawn from international movements, or sought international allies, or coped with international pressures and interventions. Ms. Enloe/Offered periodically

IDCE360 Development Theory
An interdisciplinary graduate seminar which provides a critical overview of classical and contemporary theories of development by introducing students to writings on development across many disciplines (political economy, anthropology, geography, sociology, feminist theory). The seminar encourages students to think historically, politically and analytically about the multiplicity of development processes and the complex relations of power that underlie them. Ms. Asher, Ms. Foley/Offered every year

IDCE361 Development Program and Project Management/Seminar
Explores relationships between development theory and project implementation, management, budget monitoring, scheduling and evaluation. Focuses on problem identification, developing project proposals designing environmental and social-impact assessments and creating evaluation frameworks. Emphasizes case studies. Mr. Bell, Ms. Grandia/Offered every year

IDCE363 Decision Methods for Environmental Management and Policy/Lecture, Discussion
See Environmental Science 261.

IDCE364 Seminar on Monitoring and Evaluating Development Projects
Reviews the growing literature relating to the theory and methods of evaluation to learn from mistakes of past development projects in order to design more effective ones in the future. Participants think through the implications of the review in evaluating development projects of their own choice. Staff/Offered periodically

IDCE365 Graduate Seminar in Economic Geography, PART II: Fundamentals and Current Debates/Seminar
See Geography 365.

IDCE369 Religion, Identity and Violence in a Globalizing World/Lecture, Discussion
See International Development and Social Change 259.

IDCE371 Digital Image Processing/Lecture, Laboratory
See International Development and Social Change 271.

IDCE373 Social Movements, Globalization and the State/Lecture, Discussion
See International Development and Social Change 253.

IDCE375 Gender and Global Change/Lecture, Discussion
See International Development and Social Change 285.

IDCE376 Spacial Database Development
Examines the procedures and technologies used for spatial database development in support of Geographic Information Systems (GIS). Topics covered include sustainable database design, database import/export/update programming, advanced vector analysis, internet mapping trends and GIS-related business process modeling. Staff/Offered every year

IDCE377 Gender, Environment and Development/Seminar
See Geography 277.

IDCE378 The Creation of Nationalism, Nationalist Cultures and Symbols/Lecture, Discussion
See Sociology 255.

IDCE379 20th-Century Latin America/Proseminar
See History 275.

IDCE380 Urban Ecology: Cities as Ecosystems/Lecture, Discussion
See Geography 280.

IDCE381 Politics and Power in Third-World Societies/ Lecture, Discussion
See International Development and Social Change 287.

IDCE382 Management of Environmental Pollutants/Seminar
See Environmental Science 282.

IDCE385 Research Themes in GIS

IDCE386 Advanced Topics in Comparative Politics/Seminar
See Government and International Relations 286.

IDCE388 Vector GIS/Lecture, Laboratory
See International Development and Social Change 296.

IDCE389 Development Policy/Seminar
See Geography 289.

IDCE390 CDP Research Seminar
This seminar advances research and communication skills by working on specific projects proposed by students. Students will refine their research questions or objectives, design a research methodology, and prepare a presentation of their project. This seminar focuses on the research process and the delivery of information rather than the research content. The first part of the course includes an overview of research approaches in community development and planning, as well as data interpretation, definition of assumptions, policy inferences, and assessment of contextual situations. The second part focuses on the review and discussion of students' projects to refine the overall research design. Projects can be at any stage of development, from a preliminary proposal to a completed report or thesis. The third part consists of presentations by students of their proposals or findings with the intent of sharpening their delivery and communication skills. Ms. Chion/Offered every year

IDCE391 GISDE Professional Seminar
Required for M.A. in geographic information sciences for development and environment. The seminar is restricted to GISDE M.A. students and focuses on applications of GIS and formulation of the research proposal. Examines applications of GIS to environment and development. Offered every year

IDCE392 GISDE Research Seminar
Restricted to students of M.A. in GISDE. Students work with the adviser on a research project. This is for students who opt to focus extra effort on the master's research project. Staff/Offered every semester

IDCE393 GISDE Research Seminar
See International Development, Community and Environment 392.

IDCE394 GISDE Research Seminar
Required for M.A. is Geographic Information Sciences for Development and Environment. The seminar is restricted to GISDE/M.A. students and focuses on the research project. Staff/Offered every semester

IDCE395 Participation and Environmental Management/Lecture, Discussion
See International Development and Social Change 294.

IDCE397 Master's Thesis
Master's degree candidates may register while working on research for their thesis or published paper. Staff/Offered every year

IDCE398 Internship/Field Work
Graduate students may elect to take graduate credit for extended internships. Permission of instructor. Contact the IDCE Office for internship proposal forms. Staff/Offered every semester

IDCE399 Independent Study
Staff/Offered every semester

IDCE30200 People AND/OR Profits? Issues at the Nexus of Development and Management
The worlds of business and development are increasingly intertwined: corporations are tackling social and environmental sustainability problems; and at the same time, development and planning professionals are studying management and acting entrepreneurially. Given the inevitable tension between people, nature and profits, issues at the nexus of development and management can be controversial. In this special elective, students will learn about the overlaps and assumed dichotomies among the fields of management and the areas of international development, community and the environment. Issues will span the three sectors: for-profit, nonprofit/NGO and government. Potential topics include poverty, leadership, technical tools such as GIS, sustainability, labor and disaster. Each session of the seminar will be taught by a different pair of IDCE/GSOM faculty. This unique format will allow for exposure to a wide range of issues and divergent perspectives. (7 weeks) Mr. Tigan/Offered occasionally

IDCE30201 GIS and Community Profiles: Mapping Strategies for Planning and Community Development
This seven-week introductory GIS course designed for community-development practitioners explores the relationship of census data and community indicators to GIS mapping techniques that are increasingly fundamental components of planning and community-development professions. The course covers both theoretical and practical dimensions of spatial, mapping approaches to community data sets and indicators and prepares students for common mapping strategies in municipal planning departments. The course combines a lecture format that creates a theoretical foundation with practical, computer-lab exercises and projects in GIS mapping. (1/2 unit, second half Spring) Staff/Offered every year

IDCE30202 Land Use Seminar
How do communities decide on the use of their land? Who has access to land and who does not? Under which conditions can disadvantaged groups engage in land-use negotiations? How are Latino families in San Francisco battling to retain their homes and jobs against zoning rules that favor dot-com and development of expensive lofts? How are Indian Pehuenches and environmentalists in the Bio-bio river in Chile negotiating land ownership with industrialists and hydroelectric plant developers? How are artists struggling to find space to live and work in the now popular "art districts"? How are Chinese city officials creating a real estate market and for whom? Land-use decisions are central to the development opportunities of any community. However, those decisions are embedded in complex political processes that in many cases obscure the social and economic implications. The task of this

seminar is to explore the complexities of these processes and to understand how residents, developers and government officials negotiate land-use decisions. Major topics: Cities and environment: Natural capital in Chile, urban sprawl and smart growth in California; Urban places: Downtown, art districts, plazas; Retail trends: Big box development, street vendors, e-commerce; Profit and people: Lofts vs. family housing in San Francisco, building a real estate market in Beijing, multigenerational land ownership in Colombia. Ms. Chion/Offered every year

IDCE30204 Advanced Community Development Finance and Research
This master's level course is designed for students who demonstrate competence in real estate or business finance and/or have successfully completed the IDCE course "Community Development Finance." An expansion of the Community Development Finance course, this course includes advanced lectures on market analysis, real estate appraisal, construction contract negotiation, bonding, loan guarantees, tax credits, and brownfield financing. Combined with readings and lectures are field studies, in a studio approach, directed at specific projects with a substantive end product for potential clientele. For example, a report on the advantages and disadvantages of the Federal government's New Market Tax Credit program along with a recommended process of application for a city; or the financing of a low-moderate income housing project for a nonprofit; or a strategic examination of a local community's economic health including a SWOT-type analysis. Mr. Tigan, 1/2 credit offered spring, every year, second seven-week module

IDCE30205 Climate Change, Energy and Development
This course will explore the environment-energy challenge of development with a particular emphasis on climate change. Human burning of fossil fuels for electricity generation and transportation is changing the earth's climate by changing the composition of the atmosphere. As demand for energy increases in both developing and developed countries and the risks associated with climate change are becoming more evident, the challenges of confronting climate change are mounting. The challenges of climate change mitigation measures and the associated conflicts between developed and developing countries will be explored as will the uneven distribution of climate-change impacts in the developing world. Adaptation to climate change as well as mitigation will be discussed. Ms. Stephens

IDCE30207 Gender, Militarization and Development/7-Week Module (1/2 credit)
This intensive seven-week seminar explores how the processes of militarization—in war time and in alleged peacetime—rely on certain ideas and policies about masculinity and femininity. Asking, "Where are the women?" will be central to the entire course. Among countries considered will be the Philippines, Rwanda, Afghanistan and Chile. Among the topics whose gendered dynamics affecting development will be investigated are violence against women, militias, peacekeeping efforts, trade in small arms, definitions of "security" and the interventions of foreign governments and aid agencies. Ms. Enloe/Offered periodically

IDCE30209 Environmental Research Design and Development
Research is the biggest industry in the world, a vital social enterprise. This class has three complementary aims: 1) helping students to understand the research process, its principles, approaches and challenges; 2) introducing specific methods and techniques—qualitative, quantitative and mixed—and practicing them in the field; and 3) getting students well on track with their own research projects (paper or theses). The research journal serves as the student's M.A. research foundation, documenting the identification of the research topic, problem, questions, hypotheses, detailed notes on sources (literature review), and the planning and design of data collection methods. Case studies will be presented to illustrate field design and methods. Students will work in teams to undertake three field tasks: 1) design and apply a field sampling plan (air and/or water quality data) to the local environment, analyze and present results; 2) design and apply a survey questionnaire; and 3) undertake a focus group. Students will also become familiar with SPSS statistical analysis software. Seven-week seminar. Mr.Downs/Offered spring, every year

IDCE30212 Introduction to Quantitative Methods/Lecture, Laboratory
See International Development and Social Change 110.

IDCE30213 Final MA Project Workshop (1/2 credit per semester)
A yearlong seminar for second-year IDCE master's degree students writing their final research paper. Staff/Offered every year

IDCE30214 Landscape Ecology/Lecture, Discussion
See Geography 232.

IDCE30217 Economic Fundamentals for International Development
Economic Fundamentals for International Development introduces economic history, as well as microeconomics and macroeconomics to the noneconomists, while illustrating practical applications of these techniques to real-world development situations. Course focuses on applications of economics to managerial decision making and government policy. Students with some familiarity with basic economics may take IDCE30247 Development Economics. IDCE30217 is usually offered in the fall semester while IDCE30247 is usually offered in the spring. With permission of the IDSC economics instructor, IDSC graduate coordinator and/or the IDCE director, this requirement may be fulfilled with another graduate-level economics course offered at the graduate level. It is highly recommended that students take this core economics course in the first year of their M.A. program.

IDCE30218 Community-Development Decision Making and Negotiation
The field of community development and related professions demands that a practitioner has informed and timely decision-making skills. Daily compromises and negotiations characterize the profession. This course will blend the academic approach to the subjects with the case study of real-world experiences of the instructor. Instruction will include a range of decision options, multiple criteria analysis, value prioritization, information collection and its weighing of quality and relevance. A combination of extensive readings and lectures, case studies and modeling of decision criteria will be employed. A particular emphasis will be on decisions typical to the field of community development, after treatment of generic decision theory. Mr. Tigan/Offered every year

IDCE30219 Risk Analysis: Policy and Methods/1/2 credit/seven week module
See Environmental Science 265.

IDCE30220 Advanced Remote Sensing/Lecture, Laboratory
See Geography 282.

IDCE30221 Education and Development/Seminar
See International Development and Social Change 221.

IDCE30222 Advanced Topics in Development Theory
See International Development and Social Change 264.

IDCE30224 Participatory Project Evaluation

Provides students with an understanding of the conceptual, methodological and practical aspects of field-based project evaluation in international development and the social context of interests and concerns within which such evaluations occur. The course covers systematically all phases of evaluation research, and places particular emphasis on the evaluation process as a collaborative undertaking that engages the participation of local resource persons (project staff, beneficiaries, local experts), adding value in the form of ownership, knowledge and improved project design. Ms. Rachel/Offered every year

IDCE30225 Grant Writing for Community Developers/Seminar

Students go through a step-by-step process to gain fundamental grant research and writing skills. Writing problem statements, goals and objectives statements, program activities, evaluation templates and logic models are covered. Students learn about public and private funding sources. The end product of this seven-week module is a completed grant proposal for an organization of the student's choosing. Ms. Ross/Offered every year

IDCE30226 Biogeochemical Cycles and Global Change

This course provides a solid foundation in the environmental sciences of the earth's interconnected cycles and systems so that students understand the science associated with society's most pressing environmental issues. Material cycles to be explored include carbon, nitrogen, phosphorus, sulphur and mercury. These biogeochemical cycles will be explored with an earth system science perspective including the hydrosphere (water), the atmosphere, the biosphere (living things) and the lithosphere. The impact of human activity on these cycles and systems will be integrated throughout the semester, including discussions on climate change (energy and the carbon cycle), land-use (impacts of deforestation and agriculture), water resources, and human-induced changes to the oceans. Also to be discussed will be the challenges of effectively integrating science in environmental policies to mitigate adverse anthropogenic impacts to biogeochemical processes. This course, an interdisciplinary natural science course, is appropriate for those with little or no natural science background, but it has been designed to also be a valuable integrating course for those with a strong background in biology, chemistry or geology. Offered every other year

IDCE30229 Program Monitoring and Evaluation

This half-credit course emphasizes a qualitative approach to participatory and empowering monitoring and evaluation of development projects and programs. The course aims to develop conceptual and practical skills and tools of development practitioners and focuses on the iterative action and reflection cycles of planning, collecting, analyzing, interpreting, acting, utilizing and communicating data, for the purpose of monitoring and evaluating programs and projects. The course covers participatory evaluation, utilization-focused evaluation, empowerment evaluation, outcome mapping and impact evaluation. (1/2 unit, first half Spring) Mr. Bell/Offered every year

IDCE30230 Applying Anthropology: From Field Work to Action

See International Development and Social Change 214.

IDCE30231 Humanitarian Assistences in Complex Emergencies/Disasters

Disasters and Complex Humanitarian Emergencies (DCHE) have become increasingly common. Within the context of an emerging global political economy, effective delivery of humanitarian assistance has become complex and controversial. This course explores the theoretical and policy issues in DCHE with an emphasis on the roles of governmental and nongovernmental organizations in them. Drawing from a wide variety of case studies, this course will focus on the factors that shape risks and the vulnerability of affected populations and responses of government and NGOs. This course will provide students with comprehensive insights into the needs and policy challenges in DCHE situations and equip them with the awareness, understanding and skills that are essential for effective service in a humanitarian crisis. It will be particularly useful for those interested in working with international and governmental organizations as well as NGOs. This is a reading-intensive, interdisciplinary course designed for a range of backgrounds and experiences. Mr. Fernando/Offered every year

IDCE30235 Latino and Latin American Development Alternatives/Seminar

See International Development and Social Change 235.

IDCE30238 Public Communication Seminar

Why is it so hard to have a really good time on New Year's Eve? Why are amusement parks some of the saddest places on the planet? Why do creativity courses and speech-communication seminars, though so attractive to the business community, always seem to disappoint? Because you can not approach fun, amusement, creativity or effective communication directly. There is some innate resistance. Someone trying to have fun, amuse, create or communicate ends up not having fun, being amusing or creating anything and only communicates effort. T.S.Elliot said that to write poetry you have to "give a bone to the watch-dog of the mind." When community organizers study acting they develop through art's indirect process: presence, confidence and the ability to speak from the deepest part of themselves to that which is highest in their audience. Mr. Munro

IDCE30239 Microfinance, Gender and Newliberalism

Today, microfinance is the dominant policy in the poverty alleviation strategies worldwide. The 2006 Nobel Peace Prize was awarded to a Mohammad Yunus, a leader in microfinance in Bangladesh. Increasingly microfinance is used as important instrument in development policies concerned with income generation, sustainable development, gender inequality, empowerment, reproductive health, education, good governance etc., hence, the need to develop increasingly flexible, responsive and sustainable financial products constitutes perhaps the most compelling challenge facing in development interventions. This course will take an in-depth critical look at microfinance from developmental, political economy and operational perspectives. It is based on case studies and analysis of microfinance models and experiences in different geographical regions in order to understand the strengths and weaknesses of microfinance-based financial intermediation in development. It will also examine the strategic planning, implementation and evaluation strategies of microfinance projects. The purpose is to provide a sound theoretical and practical knowledge of microfinance. Mr. Fernando

IDCE30240 Community Planning Studio

This studio focuses on the development of a specific community plan. This includes an assessment of existing conditions and their development potential; an understanding of the community goals; and the drafting of a plan, policies and regulations. For example, the planning studio has studied the mission of a neighborhood in San Francisco in the development of its community plan and zoning controls. This planning studio identified specific policies and regulations that could enhance the economic and cultural vitality of the neighborhood, while retaining the existing population and workers. Ms. Chion/Offered every year

IDCE30241 ENVIRONMENTAL TOXICOLOGY/LECTURE, DISCUSSION
See Environmental Science 241.

IDCE30243 SEEING LIKE A HUMANITARIAN AGENCY
Since World War II, several different but overlapping regimes have emerged to help structure humanitarian responses to large-scale forms of displacement. In what ways do these evolving regimes enable humanitarian agencies to "see," and in what ways does their particular field of vision differ from that of states, academics, policymakers and the displaced themselves? What kinds of blind-spots (theoretical, methodological and ethical) inevitably result? This seminar will explore these questions from three different vantage points, each composing one part of the course as a whole. Part one will provide an overview of the literature and the main concepts of the course. Special attention is focused on the ways scholars and policymakers have historically constructed displacement as a "problem" either for analysis or action, and how these concerns have shifted over the past three decades. Part two will consist of ethnographic studies of humanitarian interventions in different geographic settings, which will highlight the relevance (and limits) of concepts and methods drawn from the social sciences, including anthropology. Part three will address some of the opportunities and dilemmas humanitarian emergencies present for those who wish to study or to manage them. Mr. MacLean

IDCE30247 ECONOMICS OF POPULATION/LECTURE, DISCUSSION
See Economics 247.

IDCE30248 WOMEN AND HEALTH
This course introduces students to anthropological and sociological perspectives on the intersection of gender and health. In the course we will examine several theoretical approaches to women and health, such as feminist and political economic perspectives. We will explore key women's health issues such as women's experiences with the medical establishment, health disparities along lines of race and class, reproductive health, reproductive rights and women's experiences with HIV/AIDS. These issues will be explored in the context of the United States and developing countries. Ms. Foley

IDCE30250 EMERGING PERSPECTIVES IN COMMUNITY PLANNING/SEMINAR
Community planning is an emerging field facing major challenges. Practitioners are in great need of new thoughts and new tools that allow them to confront the great pressures of corporate power against the quality of life of a community. This seminar includes a discussion of new debates in the field through books, professional reports and films. The intent of the seminar is to gain a broader understanding of the challenges of community development and to sketch new ideas and strategies to cope with those challenges. Through this effort, students acquire skills to analyze the social and political tensions inherent in community planning and have the opportunity to define their own political and professional positions. Ms. Chion/Offered every year

IDCE30252 CORPORATE ENVIRONMENTAL MANAGEMENT
See Management 252.

IDCE30253 INTERNATIONAL POLITICAL ECONOMY
See Government and International Relations 226.

IDCE30256 PEASANTS, RURAL DEVELOPMENT AND AGRARIAN CHANGE
See International Development and Social Change 206.

IDCE30259 FACILITATING COMMUNITY ASSOCIATIONS
Local community-based associations play an increasingly important role in defining and shaping development initiatives. The focus of the course is on identifying, investigating and facilitating community-based associations in nonwestern societies (including informal work and economic groups, women and youth groups, savings and credit societies, mutual support societies, farmers' associations and local natural-resource management groups). The course focuses on building ties of local community associations with local government authorities, NGOs and development projects, and formal microfinance institutions. Students learn how to work with local experts and community members, facilitate income generating, financing and marketing activities, participate in local discourses on human rights and public health, and build ties of these groups with the formal sector and external development actors.

IDCE30263 THE CLIMATE SYSTEM AND GLOBAL ENVIRONMENTAL CHANGE/ LECTURE, DISCUSSION
See Geography 263.

IDCE30265 SOCIAL MOVEMENTS: QUEST FOR JUSTICE
See Sociology 265.

IDCE30269 RACED NATURE, GENDERED DEVELOPMENTS: THE POLITICAL ECONOMY OF ENVIRONMENTAL CONSERVATION/SEMINAR
See International Development and Social Change 269.

IDCE30270 ENVIRONMENT, POVERTY AND HEALTH
This graduate seminar class will combine risk and vulnerability theory, social-learning theory and systems theory with practical applications. Readings will be discussed and field work carried out. The field work will interface with a local environmental-justice and health research project being carried out by the instructor and partners in Worcester. We will discuss how to develop methods to address interrelated problems of environment, poverty, social justice and health in a variety of settings. Case studies will include malaria in East Africa, and pollution-related illnesses in Central Mexico. Students will work in small teams to design intervention projects for their chosen context. Mr. Downs/Every year, 2nd half of spring

IDCE30275 GENDER IN DEVELOPMENT PLANNING/7-WEEK MODULE (1/2 CREDIT)
This mini-course explores the rationale for incorporating gender into development planning and analysis and builds knowledge, expertise and skills, which will enable course participants to integrate gender analysis into their various fields of academic and professional responsibility. We clarify approaches and identify tools for gender analysis in the context of participatory research, institutional change and community empowerment. We also explore methods of gender analysis for their usefulness to national policies and programs and for the design, implementation, monitoring and evaluation of programs and projects. Ms. Thomas-Slayter/Offered periodically

IDCE30276 ENVIRONMENTAL LAW/LECTURE, DISCUSSION
See Government and International Relations 276.

IDCE30277 SUSTAINABLE CONSUMPTION AND PRODUCTION
The increasingly unsustainable pressure on the Earth's natural systems calls for radical changes in the way people in the industrialized and in the rapidly growing economies satisfy their appetite for goods and services. Some believe that innovation in technologies is our great hope, while others emphasize the need to change the consumption patterns of individuals and societies. Both necessitate changes in institutions, values, and social arrangements. This advanced seminar examines the

role that changes in technology, institutions and culture might play in bringing about the necessary change toward more environmentally sustainable development. Four types of innovation are discussed: in the production process, in product design, in function delivery by way of products and services, and in a larger sociotechnical system. The course draws on theories of technological innovation, consumer behavior and institutionalism as well as empirical case studies from the United States, Europe and some developing countries. The course considers the key drivers of change, such as government policy, market forces, cultural norms, activities of mission-oriented organizations, social movements and others. Ms. Brown

IDCE30287 Fundamentals of Environmental Science/Seminar
This course will give you the literacy and skills you need to understand the science behind environmental problems that affect us all: water pollution, air pollution, environmental health risks, population growth and exploitation of natural resources. The course aims to provide a solid foundation in important scientific principles, complementing courses with a joint science-policy orientation or a more policy-oriented approach. It applies basic ideas from physics, chemistry and biology to environmental problem solving. It will also apply math skills–especially algebra and some basic calculus–to strengthen your quantitative ability. Students will be encouraged to think critically, work in teams to solve problems, present solutions and discuss topics. Real-world applications and case studies will be used to place the methods and models in a practical context. Three fieldwork sessions will also be held using instruments to measure contaminant levels in air, water and soil. Graded elements include a study journal, homework problems, class participation and a final paper on a relevant topic of your choosing. Mr. Downs/Offered every fall

IDCE30288 Applied Ecology
See Biology 302.

IDCE30289 Community Development Finance/Lecture, Discussion
This course introduces students to the field of community development, with a particular focus on finance. The class explores the roles of various "field actors," such as developers, community-based community-development corporations, other nonprofits, for profits, banks, local governments and low-income residents. Students learn about the use of governmental subsidies to achieve public purposes, hot and cold commercial real-estate markets, the basics of identifying financial gaps in public-spirited projects, the financial analysis necessary to attract debt and stimulate equity investment, strategies to fill the gaps and ways to sustain projects. Familiarity with Excel spreadsheets is useful. Mr. Tigan/Offered every year

IDCE30290 Participatory Research Methods/Seminar
Explores a range of participatory, action-oriented and empowering approaches and methods of inquiry. The course provides a learning environment and a process that enables students to deepen their understanding of the theory and practice of participatory research. It provides an opportunity to practice specific methods and strategies and to develop critical criteria and skills for implementing and assessing participatory methods. The course balances the theoretical and conceptual dimensions of participatory research and inquiry (through readings, case studies and reflection on personal practice) with the application of participatory skills, methods and strategies. Mr. Bell/Offered fall semester

IDCE30291 Qualitative Research Design and Methods/Seminar
Provides an introduction to qualitative inquiry and explores the major assumptions, language and logic of qualitative research. The course emphasizes the modes of thinking and specific practices of qualitative research and focuses on conceptualizing and designing qualitative studies. It explores the issues and practices of qualitative inquiry; emphasizes strategies for developing research questions; and covers methods for data gathering, analysis and interpreting qualitative research. Mr. Bell/Offered spring semester

IDCE30292 Participatory Development Planning
The course focuses on the use of participatory development planning and research in rural development planning. It provides an overview of recent initiatives of scaling-up and institutionalization of participatory development, including case studies of country-based Participatory Poverty Assessments and other similar large-scale programs. It also discusses the specifics of local participatory planning and monitoring, including identification of beneficiary needs and project areas, facilitation of rural poor groups, participatory training of agents and promoters, necessary institutional and financial arrangements, as well as participatory action research, monitoring and evaluation. (7-week graduate skills course) Mr. Rodima

IDCE30293 Youth and Community Development: Theory, Policy and Practice/Seminar
See Community Planning and Development 30293.

IDCE30294 Theoretical Perspectives and Practical Decision Making in Development/7-week Module (1/2 Academic Credit)
This course focuses on four theoretical perspectives on development and their implications for practical decision making in regard to policies and programs for two fishing communities in the fictitious country of Arcadia. Five key intellectual questions shape our discussions: Who are the disadvantaged in a given social system? What is the nature of their disadvantage? What are the social relations (structures and organizations) that maintain their disadvantage? What are the historical patterns and trends in these social relations? What are the relationships among the local, national and international levels in creating and perpetuating these disadvantages? Ms. Thomas-Slayter/Offered every year

IDCE30296 Nonprofit and NGO Management Issues/7-week Module
This course integrates readings, class discussion and field observations to understand the complex relationships between youth and community development. It provides an overview of adolescent development, with a specific focus on urban teens. Students are introduced to the strengths and challenges of young people growing up in inner-city neighborhoods. The course examines neighborhoods and after-school programs as particularly important contexts for youth development. Students discover that few youth-development programs address community-level factors that influence young people's futures, and conversely, few community-development initiatives involve youth as key actors in the development process. As a final project, students develop proposals based on evidence and driven by theory to begin to fill this critical gap. Ms. Ross/Offered every other year

IDCE30297 Refugees and Forced Migration/Seminar
See International Development and Social Change 291.

IDCE39912 Social Policy, Immigration and Poverty/Seminar
See Sociology 285.

SOC288 Globalization: Fashion and Foul Play/Seminar
See Sociology 288.

Program Faculty

Robert J. S. Ross, Ph.D.
David Angel, Ph.D.
Yuko Aoyama, Ph.D.
Kiran Asher, Ph.D.
Michael Bamberg, Ph.D.
David Bell, Ed.D.
Parminder Bhachu, Ph.D.
Sarah Buie, M.F.A.
Paul Burke, Ph.D.
Marvin D'Lugo, Ph.D.
Carol D'Lugo, Ph.D.
Joseph de Rivera, Ph.D.
Patrick Derr, Ph.D.
William Ferguson, Ph.D.
Everett Fox, Ph.D.
Wayne Gray, Ph.D.
Beverly C. Grier, Ph.D.
Douglas Little, Ph.D.
Bruce London, Ph.D.
James T. Murphy, Ph.D.
Simon Payaslian, Ph.D.
Richard Peet, Ph.D.
Paul W. Posner, Ph.D.
Dianne Rocheleau, Ph.D.
Paul Ropp, Ph.D.
Walter Schatzberg, Ph.D.
Valerie Sperling, Ph.D.
Michael Spingler, Ph.D.
Barbara Thomas-Slayter, Ph.D.
Maurice Weinrobe, Ph.D.
Kristen Williams, Ph.D.

Program Overview

The International Studies Stream is an innovative option within Clark's Program of Liberal Studies, which offers students the opportunity to structure their broad liberal-arts education by focusing on international themes and issues.

To succeed in contemporary society, students must be familiar with the different ways common problems—such as economic growth, immigration, social welfare and environmental regulation—are dealt with across the globe. Students need to understand the historical, social and political foundations for these differences, and they need to be able to assess their own societies within an international context.

The International Studies Stream helps students understand the implications of global integration for cultural identity, economic growth, peace, security and development. Language and cultural studies provide the skills necessary for effective participation in the global economy.

This program infuses students' educational experiences with an international perspective. Through courses, guest speakers, internships and study-abroad opportunities, the International Studies Stream provides the broad-based international experience students will need in our increasingly global society.

A flexible curriculum

The foundation of the International Studies Stream is a set of courses with an international focus and enhanced language training designed to place the experience of the United States and other countries in global context.

The curriculum incorporates the best elements of undergraduate teaching: team-taught interdisciplinary courses; small classes taught in seminar format; genuine language proficiency developed in part through study outside the United States; extension of academic activities beyond the classroom through field trips, speakers programs and other informal activities; and careful mentoring of students.

This program recognizes that success in most careers now requires international perspective and language skills. International Studies Stream curriculum can be combined with any major, and is flexible enough to address the educational needs of aspiring bankers, journalists, attorneys, physicians, grassroots organizers and many others.

A New Concentration

The University has approved a new Globalization and Society concentration for those International Studies Stream students who wish to deepen their globalization studies. The specific course requirements will be announced during the upcoming academic year.

Undergraduate Requirements

Students in any major may participate in the International Studies Stream. The program is intended to provide focus for a student's studies rather than to impose many additional requirements. The stream includes a broad range of courses and extracurricular activities from which students can select to create an appropriate, challenging program of study. Successful completion of the stream will be designated on students' transcripts.

Requirements for the stream are:

- The core course: IDND066 Global Society
- A follow-up to Global Society, GOVT 067 Problems of Globalization
- Program of Liberal Studies (PLS) requirements—All Clark undergraduates are required to complete eight PLS courses: a verbal-expression course, a formal-analysis course, and six perspectives courses. Students in the International Studies Stream automatically satisfy at least four of the eight PLS requirements by taking internationally focused courses in the aesthetic perspective, global perspective, historical perspective, language and culture perspective, and values perspective. Students may fulfill the verbal-expression requirement in or out of the stream; the formal analysis and scientific perspective requirements are not part of the stream. See the perspectives course listings at the end of this section.
- Expanded foreign-language proficiency—Beyond the Program of Liberal Studies language and culture perspective requirement, International Studies Stream students complete two additional semesters of language study or demonstrate competence equivalent to two years of language study at the college level. Clark offers courses in French, Spanish, German, Russian, Japanese, Chinese and Hebrew. Proficiency tests for other languages can be arranged.
- Study-abroad experience—U.S. students in the stream must complete at least one unit of study outside of the United States. They may participate in a semester or yearlong study-abroad program, a

May-term or summer course, or an internship. Clark study-abroad sites include Namibia, England, Scotland, China, France, Germany, Japan, Luxembourg or Spain. For further information, see "Office of Study Abroad Programs." International students, whose study-abroad experience is at Clark, complete an internship with an international agency in the United States, or a research project focused on an international issue. Please note: Participation in the International Study Stream is not required to participate in study-abroad programs.

Perpectives Courses

The following courses are approved for credit in the International Studies Stream. Due to certain classes being taught periodically, some of the following courses might not be taught this semester. Please check the Web for up-to-date course listings.

Aesthetic Perpective

ARTH010 Stone Age to Our Age: Monuments and Masterpieces of Western Art
ARTH155 Art of Africa, Oceania and Native America*
ARTH156 Art of Black Africa*
SCRN121 Survey of International Film Movements
SPAN246 Studies in Spanish Cinema
SCRN010 Introduction to Screen Studies
SCRN121 International Cinema
SCRN263 Topics in French Cinema

Comparative Perspective

CMLT130 The National Imagination
FREN249 The French-Speaking World*
GEOG016 Introduction to International Economies
GEOG127 Political Economy of Development
GEOG179 International Political Ecology
GOVT070 Introduction to Comparative Politics
GOVT208 Comparative Politics of Women
HIST124 Ethnicity and Nationalism
HIST251 Comparative Study of Revolution: The French Revolution of 1789 and the Beginnings of Modern Revolutions
ID131 Local Action, Global Change
ID170 Ecology and Economy in the Tropics
ID120 Introduction to Social Anthropology
ID125 Tales from the Far Side: Development and Underdevelopment
ID212 Women and Social Change
PSTD120 International Conflict Management
SOC100 Introduction to Sociology
SOC160 Global Cultures and Identities
SOC256 Class, Status and Power

Global Perspective

IDND066 Global Society
GOVT067 Problems of Globalization
GOVT090 Political Science Fiction
ECON010 Economics: A Comparative Approach
ECON100 The Global Economy

Historical Perspective

GOVT103 Africa and the World
HIST062 War and Peace in the Middle East
HIST070 Our European Roots: Western Civilization from Ancient Hebrews through the Renaissance and Reformation
HIST071 Our European Roots: Western Civilization from the 17th-Century to the Present
HIST080 Introduction to Modern Asia
HIST084 Japanese Civilization
HIST177 Latin America 1825
HIST181 Chinese Civilization
HIST182 Modern China: 1880 to the Present
HIST184 Modern Japan
HIST255 Global Relations: 20th Century*

Language and Culture Perspective

CHIN101/CHIN102 Introductory Chinese
FREN136 Studies in the Evolution of French Culture
FREN101/FREN102 Elementary French I, II
FREN103 Elementary French
FREN105/FREN106 Intermediate French I, II
FREN120 Ways of Writing, Ways of Speaking
GERM101/GERM102 Introductory German I, II
GERM103/GERM104 Intermediate German I, II
GERM131 Spoken and Written German
GERM140 Modern German Prose
GERM156 The Modern German Short Story
GRK101/GRK102 Introductory Greek I, II
HEBR101/HEBR102 Elementary Hebrew I, II
HEBR103 Intermediate Hebrew
HEBR104 Intermediate/Advanced Hebrew
HEBR105 Advanced Hebrew
JAPN101/JAPN102 Elementary Japanese I, II
JAPN103/JAPN104 Intermediate Japanese I, II
JAPN105 Advanced Japanese
LAT101/LAT102 Introductory Latin
SPAN101/SPAN102 Elementary Spanish I, II
SPAN103 Elementary Spanish Intensive
SPAN105/SPAN106 Intermediate Spanish I, II
SPAN127 Practice in Oral and Written Spanish
SPAN131 Readings in Hispanic Literatures
SPAN238 Hispanic Literature of Political Commitment/Lecture
SPAN248 Studies in Latin American Cinema/Lecture, Discussion

Values Perspective

HIST272 19th- and Early-20th Century European Values (Circa 1800-1930)
HIST033 Confucianism, Buddhism: Cultural Heritage of East Asia
PHIL105 Personal Values
PHIL107 AIDS: Ethics and Public Policy
PHIL130 Medical Ethics
PHIL132 Social and Political Ethics
PHIL150 Philosophy of Religion
PHIL221 Social and Political Philosophy
PHIL 210 Modernism in Philosophy
PSTD101/ID101/PSYC176 Intro to Peace Studies
PSTD170 Introduction to Peace Studies
SOC204 The Holocaust: A Study of Genocide
SPAN152 Hispanic Literature of Political Commitment

Verbal Expression

HIST032 Africa's 21st Century: Three Alternative Models

Courses

ARTH010 From the Stone Age to Our Age: Monuments and Masterpieces of Western Art/Lecture, Discussion
See Art History 010.

CHIN101 Elementary Chinese/Lecture, Discussion
See Chinese 101.

CMLT125 Crossing Boundaries/Lecture, Discussion
See Comparative Literature 125.

CMLT130 The National Imagination
See Comparative Literature 130.

ECON010 Economics and the World Economy/Lecture, Discussion
See Economics 010.

ECON100 Birth, Death and Economics: The Economics of World Population
See Economics 100.

FREN101 Elementary French/Lecture, Discussion
See French 101.

FREN103 Elementary French: Intensive/Lecture, Discussion
See French 103.

FREN105 Intermediate French I/Lecture, Discussion
See French 105.

FREN106 Intermediate French II/Lecture, Discussion
See French 106.

FREN108 Literature and Art of Revolt in Modern France/First-Year Seminar
See French 108.

FREN120 Ways of Writing, Ways of Speaking
See French 120.

FREN136 Studies in the Evolution of French Culture/Lecture, Discussion
See French 136.

GEOG016 Introduction to Economic Geography/Lecture, Discussion
See Geography 016.

GEOG127 Political Economy of Development/Lecture
See Geography 127.

GEOG179 Globalization, Environment and Justice/Lecture, Discussion, First-Year Seminar (in alternate years)
See Geography 179.

GERM101 Introductory German/Lecture, Discussion
See German 101.

GERM103 Intermediate German I/Lecture, Discussion
See German 103.

GERM104 Intermediate German II/Lecture, Discussion
See German 104.

GERM131 German Culture and Conversation/Lecture, Discussion
See German 131.

GOVT070 Introduction to Comparative Politics/Lecture, Discussion
See Government and International Relations 070.

GOVT102 Political Science Fiction/First-Year Seminar
See Government and International Relations 090.

GOVT103 Africa and the World/Lecture, Discussion
See Government and International Relations 103.

GOVT177 Transitions to Democracy/Lecture, Discussion
See Government and International Relations 177.

GOVT208 Comparative Politics of Women/Lecture, Discussion
See Government and International Relations 208.

GOVT260 Democratic Theory/Lecture, Discussion
See Government and International Relations 260.

GRK101 Introductory Greek I, II/Lecture, Discussion
See Greek 101.

HEBR101 Elementary Hebrew I/Lecture, Discussion
See Hebrew 101.

HEBR102 Elementary Hebrew II/Lecture
See Hebrew 102.

HEBR103 Intermediate Hebrew/Lecture, Discussion
See Hebrew 103.

HEBR104 Intermediate-Advanced Hebrew/Lecture, Discussion
See Hebrew 104.

HEBR297 Sec. 6 Special Topics in Hebrew/Discussion
See Hebrew 297 Sec. 6.

HIST033 Confucianism, Daoism, Buddhism: The Cultural Heritage of China/First-Year Seminar
See History 033.

HIST062 War and Peace in the Middle East/First-Year Seminar
See History 062.

HIST070 Our European Roots: Western Civilization from Ancient Hebrews through the Renaissance and Reformation/Lecture, Discussion
See History 070.

HIST071 Our European Roots: Western Civilization from the 17th Century to the Present/Lecture, Discussion
See History 071.

HIST080 Introduction to Modern East Asia/Lecture, Discussion
See History 080.

HIST084 Japanese Civilization/Lecture, Discussion
See History 084.

HIST181 Chinese Civilization/Lecture, Discussion
See History 181.

HIST182 Modern China/Lecture, Discussion
See History 182.

HIST184 Modern Japan/Lecture, Discussion
See History 184.

ID120 Introduction to Cultural Anthropology/Lecture, Discussion
See International Development and Social Change 120.

ID125 Tales from the Far Side: Development and Underdevelopment/ Lecture, Discussion
See International Development and Social Change 125.

ID131 Local Action, Global Change/Lecture, Discussion
See International Development and Social Change 131.

ID170 Ecology and Economy in the Tropics/Lecture, Discussion
See International Development and Social Change 170.

ID182 Are We Modern Yet?/First-Year Seminar
See International Development and Social Change 182.

IDND066 Global Society
The globalization of cultural, economic and political life is one of the defining modernist themes of the 20th century. The signs of international interdependence are everywhere, from the rise of Japanese automobile factories in the heartland of the United States to the success of Hollywood movies in eastern Europe and beyond. And yet in the midst of the apparent triumph of globalization, diverse examples of fragmentation and local action and initiative also capture our attention. The great international institutions of the 20th century—the United Nations, the World Bank, and the new World Trade Organization—are also challenged by ethnic nationalism, economic protectionism, and growing introspection on the part of many countries. This course provides a wide-ranging introduction to these twin themes of global and local action, and serves as the foundation for study within the International Studies Stream at Clark University. Fulfills the Global Comparative Perspective. Staff/Offered every year

IDND067 Problems of Globilization
See Government and International Relations 067.

IDND210 Modernism in Philosophy, Literature and the Arts/ Lecture, Discussion
See Philosophy 210.

JAPN101 Elementary Japanese/Lecture, Discussion
See Japanese 101.

JAPN103 Intermediate Japanese/Lecture, Discussion
See Japanese 103.

JAPN105 Advanced Japanese/Lecture, Discussion
See Japanese 105.

LAT101 Introductory Latin
See Latin 101.

PHIL105 Personal Values/Lecture, Discussion
See Philosophy 105.

PHIL107 Logic and Legal Analysis/Lecture, Discussion
See Philosophy 107.

PHIL130 Medical Ethics/Lecture, Discussion
See Philosophy 130.

PHIL132 Social and Political Ethics/Lecture, Discussion
See Philosophy 132.

PHIL150 Philosophy of Religion/Lecture, Discussion
See Philosophy 150.

PHIL221 Social and Political Philosophy/Lecture, Discussion
See Philosophy 221.

PSYC176 Introduction to Peace Studies/Lecture
See Peace Studies 101.

SCRN010 Introduction to Screen Arts
See Screen Studies 010.

SCRN121 International Cinema to 1968
See Screen Studies 121.

SCRN263 Studies in French Cinema
See Screen Studies 263.

SOC010 Introduction to Sociology/Variable Format
See Sociology 010.

SOC160 Global Cultures and Identities/Lecture, Discussion
See Sociology 160.

SOC200 Class, Status and Power/Variable Format
See Sociology 200.

SPAN101 Elementary Spanish I, II/Discussion
See Spanish 101.

SPAN103 Elementary Spanish: Intensive/Lecture, Discussion
See Spanish 103.

SPAN105 Intermediate Spanish I/Lecture, Discussion
See Spanish 105.

SPAN106 Intermediate Spanish II/Lecture, Discussion
See Spanish 106.

SPAN127 Practice in Oral and Written Spanish/Lecture, Discussion
See Spanish 127.

SPAN131 Readings in Hispanic Literatures/Lecture, Discussion
See Spanish 131.

SPAN238 Hispanic Literature of Political Commitment/ Lecture, Discussion
See Spanish 238.

SPAN246 Studies in Spanish Cinema/Lecture, Discussion
See Spanish 246.

SPAN248 Studies in Latin American Cinema/Lecture, Discussion
See Spanish 248.

Program Faculty

Edward J. Ottensmeyer, Ph.D. - *Dean*
Margarete Arndt, D.B.A.
Barbara Bigelow, Ph.D.
Mary-Ellen Boyle, Ph.D.
Gary Chaison, Ph.D.
Keith Coulter, Ph.D.
Dileep Dhavale, Ph.D., CPA
Priscilla Elsass, Ph.D.
George Gendron,
Laura Graves, Ph.D.
Joseph Sarkis, Ph.D.
Inshik Seol, Ph.D.
Richard Spurgin, Ph.D.
Joel Sternberg, Ph.D.
Maurry Tamarkin, Ph.D.
Jing Zhang, Ph.D.

Adjunct Faculty

Robin Chase, Ph.D.
John L. Crawley, M.S., J.D.
Jane Gilligan, M.A.
Judith Kenary , M.B.A
Gerald McCarthy, Ph.D.
Saeed Mohaghegh, M.B.A.
Ruth Rowan, M.B.A., C.F.A.
Kristi Thompson, M.B.A.
Dennis Wadsworth, M.B.A.
Russell Wass, M.S.M.

Visiting Faculty

Donna Gallo
Bhaswar Gupta
William Mosher
Michael Ruff

Emeriti Faculty

Robert Bradbury, Ph.D.
Harold T. Moody, Ph.D.

Program Overview

The Graduate School of Management offers six programs for undergraduates: the management major, the major with an innovation and entrepreneurship track, the management minor, the innovation and entrepreneurship minor, the five-year B.A./M.B.A. program, and the five-year B.A./M.S.F. program. Interested students should contact the program administrator in the Graduate School of Management at 508-793-7543. Students should refer to the Graduate School of Management catalog for additional information on the M.B.A. and M.S.F. programs.

Undergraduate Requirements

The management major incorporates a variety of disciplines to form an applied preprofessional program. The undergraduate management major, minor, and the M.B.A. and M.S.F. programs are accredited by AACSB-International —The Association to Advance Collegiate Schools of Business.

The required curriculum for management majors consists of eight prerequisite courses taken during the freshman and sophomore years, and eight required courses taken during the junior and senior years. Students must have a minimum 2.0 overall grade-point average to declare management as a major. Students must take courses in the management major for letter grades. A minimum of 2.0 cumulative grade-point average in the major courses is required for graduation. Students interested in graduate study toward an M.B.A. or M.S.F. degree through Clark's accelerated program are encouraged to minor in management and consider alternative complimentary majors such as communication and culture, economics, global environmental studies or government and international relations.

Prerequisite Management Major Courses:

Freshman/Sophomore Years

MATH113 Mathematical Problem Solving or
  MATH120 Calculus I
ECON010 Economics: A Comparative Approach
ECON160 Introduction to Statistical Analysis or
  PSYC105 Quantitative Methods
MGMT100 The Art and Science of Management
MGMT101 Principles of Accounting
MGMT104 Introduction to Management Information Systems
MGMT170 Managerial Communications
MGMT203 Management Accounting

Required Courses:

Junior/Senior Years

MGMT210 Management and Behavioral Principles
MGMT230 Marketing Management
MGMT240 Corporate Finance
MGMT250 Operations Management
MGMT260 Applying the Art and Science of Management
MGMT262 Legal and Ethical Perspectives on Business

Two Management Electives* (*MGMT299 may not be used to fulfill the management elective requirement.)

For students who are interested in the management major and wish to focus their curriculum further in the area of entrepreneurship, the innovation and entrepreneurship track will provide a set of entrepreneurial experiences designed to enhance the major. The mission for this program is to provide students entrepreneurial opportunities to become economically literate, as well as a chance to explore and participate in the process of starting something new. The program is devoted to real-world entrepreneurship, which focuses on the ability to start something innovative through a student's creativity and resourcefulness.

Students interested in the management major with the innovation and entrepreneurship track should follow the management major requirements above making sure to take the following substitution courses:

- ENT215 — fulfills one of the MGMT electives, track students take one other 200 level MGMT elective
- ENT202 — is taken in place of MGMT170
- ENT265 — is taken in place of MGMT260

Students should follow all other requirements for the major.

Management Minor

Students with a primary interest in liberal arts, who also want exposure to business-related topics, should consider management as an undergraduate minor. The required curriculum for management minors consists of six courses in management, including MGMT100. Of the remaining five management courses, three must be taken at the 200 level.

Six Required Courses:

MGMT100 The Art and Science of Management
MGMT Electives: 5 required, 3 must be 200-level or higher

Students planning for the accelerated M.B.A. or M.S.F. programs should consider the management minor. Taking the following undergraduate courses and obtaining grades of B- or better will waive certain courses in the M.B.A. or M.S.F. degree programs: MGMT101 and 203, 104, 230, 240, 250. For additional information on accelerated program requirements and other prerequisite courses, please refer to the Accelerated B.A./Master's Degree Program Web pages.

Accelerated Degree Program

Management offers an accelerated B.A./Master's degree program to eligible students. For more information, visit www.clarku.edu/accelerate.

Graduate Programs

Master in Business Administration

The Clark University M.B.A. program develops competence in basic management functions, skill in managing organizations and an understanding of the global environment. Each graduate of Clark's M.B.A. program is able to demonstrate:

- competence in the functional areas of management;
- in-depth understanding of one of the functional areas of management or global business;
- skill in integrating the management functions into an effective organization, and understanding the legal, political, ethical, social and environmental responsibilities of management;
- appreciation of the global context in which most organizations function; and
- the leadership and communication skills needed to formulate and implement management decisions.

Requirements

The M.B.A curriculum consists of a combination of seven-week course modules and full-semester, 14-week courses. Modular courses count as 1/2-unit each, while a full semester course counts as one unit. A total of 16 units are required to complete the degree. Four of the units (seven courses) may be waived if equivalent courses have been completed in an undergraduate program, with a grade of B– or better within six years. A graduate internship is required for all students with less than three years work experience in the United States. In addition, students must fulfill a math entrance requirement.

Required Foundation Courses

ECON4004 Management Economics (1/2 unit)
STAT4005 Statistical Methods (1/2 unit)
STAT4006 Management Decision Models (1/2 unit)

Required Functional Courses

ACCT4100 Foundations of Accounting (1 unit)
MGMT4301 Creating Effective Organizations: Strategic Decision Making (1 unit)
MGMT4302 Creating Effective Organizations: Leadership (1 unit)
FIN4200 Financial Management (1 unit)
FIN5301 Stock and Bond Valuation (1/2 unit)
MKT4401 Marketing Management (1 unit) or
MKT4402 Marketing Strategy and Simulation (1/2 unit)
MIS4500 Management Information Systems (1 unit) or
MIS Seven-week elective (1/2 unit)
OM4601 Operations Management (1/2 unit)

Required General Management Courses

MGMT4709 Business in Society (1/2 unit)
MGMT4707 International Management and Global Competition (1/2 unit)
MGMT4708 Contemporary Business Law (1/2 unit)
Capstone (1 unit)

Capstone

In the final stages of the M.B.A. curriculum, each student must complete a course that integrates their academic program and provides a professional, cross-disciplinary, career-building experience. Students have the opportunity to apply their academic skills to the world of practice through courses such as Management Consulting Projects (CAP5792), Entrepreneurship (CAP5900), Leadership and Decision Making in Organizations (CAP5784) and Global Business Seminar (CAP5783). Students should choose a capstone option that best complements their selected area of focus.

Concentration and Free Electives

In addition to the courses listed above, students must take three to four units in one area of concentration, plus additional electives in any other area to total 16 units for the entire program. Students may choose from the following areas of concentration:

Accounting

ACCT5101 Financial Accounting and Reporting I (1 unit)
ACCT5102 Financial Accounting and Reporting II (1 unit)
ACCT5103 Management Accounting (1 unit)
ACCT 5105 Financial and Operational Auditing (1 unit)
ACCT5107 Analysis of Financial Statements (1 unit)
ACCT5108 Business Analysis and Valuation (1 unit)
ACCT5109 Nonprofit Accounting (1 unit)
ACCT/FIN5206 Tax Strategies and Management Decisions (1 unit)

Expanded Accounting Option

The expanded accounting concentration satisfies the 150-hour, post-secondary-education requirement for the Certified Public Accountant (CPA) examination. It also allows students an opportunity to prepare for the Certified Management Accountant (CMA) examination. Students pursuing this option must complete the foundation, functional and general management courses, along with the following six courses:

ACCT5101 Financial Accounting and Reporting I
ACCT5102 Financial Accounting and Reporting II
ACCT5103 Management Accounting
ACCT5105 Financial and Operational Auditing
ACCT5109 Nonprofit Accounting
ACCT/FIN5206 Tax Strategies and Management Decisions

Finance

ACCT5107 Analysis of Financial Statements (1 unit)
ACCT5108 Business Analysis and Valuation (1 unit)
FIN5201 Case Studies in Corporate Finance (1 unit)
FIN5203 Investment Strategies (1 unit)
FIN5206 Tax Strategies and Management Decisions (1 unit)
FIN5207 Advanced Derivatives (1 unit)
FIN5208 Fixed Income Securities (1 unit)
FIN5281 Case Studies in International Finance (1 unit)
FIN5301 Stock and Bond Valuation (1/2 unit)
FIN5302 Quantitative Techniques for Derivatives Valuation (1/2 unit)
FIN5309 Financial Econometrics (1/2 unit)
FIN5310 Case Studies in Derivatives (1 unit)
FIN5311 Portfolio Management (1/2 unit)
FIN5900 Technical Analysis (1 unit)
FIN5900 Real Estate Finance (1 unit)
FIN6000 Financial Institutions (1/2 unit)

Global Business

FIN5281 International Finance (1 unit, required for concentration)
MGMT4712 International Transactions (1/2 unit)
MGMT5407 International Labor Relations (1/2 unit)
MGMT5783 Global Business Seminar (1 unit)
MGMT5900 Global Entrepreneurship (1 unit)
MGMT5900 Doing Business in Northern Europe (1 unit)
MGMT6000 Global Business Teams (1/2 unit)
MKT5482 International Marketing (1 unit, required for concentration)

Management

MGMT4305 Career Development (1/2 unit)
MGMT4701 Organizational Communication (1/2 unit)
MGMT5401 The Contemporary Workplace (1/2 unit)
MGMT5402 Discrimination in Employment (1/2 unit)
MGMT5304 Negotiation and Conflict Resolution (1/2 unit)
MGMT5305 Industrial Relations (1/2 unit)
MGMT5306 Collective Bargaining (1/2 unit)
MGMT5307 International Labor Relations (1/2 unit)
MGMT5604 Services Management (1 unit)
MGMT5783 Global Business Seminar (1 unit)
MGMT5792 Management Consulting Projects (1 unit)
MGMT5802 Entrepreneurship (1 unit)
MGMT5900 Doing Business in Northern Europe (1 unit)
MGMT6000 Financial Institutions (1/2 unit)
MGMT6000 Learning by Analogy (1/2 unit)
MGMT6000 Managing Change and Conflict (1/2 unit)
MGMT6000 Advanced Topics: Global and Virtual Teams (1/2 unit)
OM5603 Operations Technology Management (1 unit)

Management Information Systems

MIS5601 Database Management Systems (1/2 unit)
MIS5602 Decision Support Systems (1/2 unit)
MIS5505 Management of Information Technologies (1 unit)
MIS5900 E-commerce (1 unit)
MIS5900 Web-site Development (1 unit)

Marketing

MKT5401 Marketing Research (1 unit)
MKT5402 Consumer and Industrial Buyer Behavior (1 unit)
MKT5403 Advertising and Promotion (1 unit)
MKT5404 Sales and Sales Management (1 unit)
MKT5405 Business to Business Marketing (1 unit)
MKT5406 Market Pricing (1 unit)
MKT5407 Services Marketing (1 unit)
MKT5482 International Marketing (1 unit)
MKT 5494 Product Management (1 unit)

Free Electives

(Count as electives but do not count towards any area of concentration)
COM4700 Managerial Communications (1/2 unit)

Master of Science in Finance

The Clark University M.S.F. program is a rigorous curriculum focusing on the skills and knowledge required to apply advanced financial theories to complex financial management problems. To be successful in this program, students need to have strong mathematical skills, along with prior course work in the following areas:

- Financial Accounting
- Economic Theory
- Statistics

Requirements

The curriculum for the M.S.F. consists of the following courses, totaling 10 units of credit:

FIN5301 Stock and Bond Valuation (1/2 unit)
FIN5302 Quantitative Techniques for Derivatives Valuation (1/2 unit)
FIN5311 Portfolio Management (1/2 unit)
FIN5309 Financial Econometrics (1/2 unit)
FIN5201 Case Studies in Corporate Finance (1 unit)
FIN5310 Case Studies in Derivatives (1 unit)
FIN5207 Advanced Derivatives (1 unit)
FIN5208 Fixed-Income Securities (1 unit)
FIN5203 Investment Strategies (1 unit)
FIN5281 Case Studies in International Finance (1 unit)

Electives (2 units) in the area of finance, accounting or economics

For Economics electives outside the GSOM department, please see your MSF adviser.

ACCT4100 Foundations of Accounting may count as an elective and is a prerequisite for all upper-level accounting electives (or U.S.-based accounting course).

Courses

MGMT011 Making a Difference/First-Year Seminar

This course will offer a scholarly perspective on "making a difference," with two emphases: youth involvement in social change, and the university partnership approach to community development. Themes of personal growth, leadership, collaboration and activism will be explored. Students will learn how to "make a difference" at various levels: in their lives, on the Clark campus and in the city of Worcester. This is a multidisciplinary course in which readings will be derived from the fields of sociology, psychology, community development, urban studies, education, social policy and political science. In addition to reflection papers and discussions, students will complete interviews with community leaders, take leadership roles in on-campus activities and have a community placement in the Main South or Piedmont neighborhood. The concluding assignment will be a proposal for a summer Making a Difference project, or another community-based social change activity. Fulfills the Values Perspective. Ms. Ross, Ms. Boyle/Offered fall semester

MGMT100 The Art and Science of Management

This course is designed to encourage students to consider how business is embedded into the larger society. It will introduce students to basic management skills and the context in which they are applied. Whether a person is working in a complex organization, such as a bank, university, high-tech firm, hospital or manufacturer; participating in a student-run activity; volunteering for a local nonprofit; or working a summer job—management skills are necessary. For management majors and minors, the course provides an introduction to the topics they will study in greater depth in their future course work. For students not majoring in management, it provides an opportunity to learn basic skills that will be helpful in their current and future activities in organizations. The course structure includes readings, lecture, service learning, case analyses, role plays and experiential exercises. The course involves considerable interaction between the professor and students, and among students, because the practice of management is about people working with, listening to, and respecting people who have different backgrounds, experiences and opinions. Staff/Offered every semester

MGMT101 Principles of Accounting/Lecture, Discussion

A user-oriented approach teaches students an understanding of accounting information and the environment in which it is developed and used. Topics include: history of accounting, accounting cycle, accounting for assets, liabilities and equity, and international accounting issues. Staff/Offered every semester

MGMT104 Introduction to Management Information Systems/Lecture, Discussion

Emphasizes basic knowledge needed to understand the field of information systems. Topics include information and organization, database management, recent developments in computer technology and their effect on management, and information systems design and management. Staff/Offered every semester

MGMT170 Managerial Communications/Lecture, Discussion

Helps students communicate with confidence by showing them how to prepare clear, concise memos, letters, reports and proposals and deliver effective oral presentations. Through class participation and in-class writing exercises, students develop greater skill in both written and oral communication. Staff/Offered every semester

MGMT203 Management Accounting/Lecture, Discussion

Emphasizes accounting from the management perspective. Students learn principles of management decision making using accounting information. Prerequisites: MGMT100, 101; not open to first-year students. Staff/Offered every semester

MGMT210 Management and Behavioral Principles/Lecture, Discussion

General principles of management are studied, emphasizing the behavior of people in organizational settings. Topics include principles of organization, decision making, leadership, motivation and rewards, job satisfaction, appraising employee performance, and the impact of demographic diversity on organizations. Staff/Offered every year

MGMT215 The Art of the New - Entrepreneurship/Lecture, Discussion

Successful entrepreneurship begins with a vision. Like an artist, the entrepreneur must be able to translate creative vision into something tangible and real. This course, for both management and nonmanagement majors, is designed to introduce students to the entrepreneurial process so that they may begin to shape their own entrepreneurial vision. Course objectives will include a realistic preview of the challenges of entrepreneurship, an understanding of the legal and ethical environment within which entrepreneurs operate, the ability to develop a business plan, and the skills to think critically and the ability to evaluate opportunities in the business or nonprofit sectors. The course will also include self-assessment activities designed to help students assess their own entrepreneurial potential. Staff/Offered every semester

MGMT222 Women in the Health-Care System/Seminar

Women play an important role in the U.S. health-care system. They represent the majority of patients, dominate many health-care occupations, and provide an important link between their families and the formal health-care system. This seminar course for juniors and seniors will explore literature that describes and conceptualizes how we define health and sickness as a society, women in their various roles in the health-care system, and how the health-care system identifies and meets women's need for health services. The subject matter is of particular salience for students who have an interest in women's studies or are thinking of a career that will bring them in contact with the health-care system, be it as a provider or manager. Offered periodically

MGMT225 Human Resource Management/Lecture, Discussion

Covers general functions of human resource management, including job design, recruitment, selection, management development and training, performance appraisal, employee rights, labor relations and collective bargaining, wages and fringe benefits, and compensation systems. Prerequisite: juniors and seniors only. Staff/Offered periodically

MGMT226 Industrial Relations/Lecture, Discussion

Introduces the concepts, theory and practice of labor-management relations. Topics include the development of the trade-union movement; union organizing; the structure, practices and outcomes of collective bargaining; the administration of the collective agreement; dispute resolution procedures; and the public policy of labor relations. Prerequisite: juniors and seniors only. Offered periodically

MGMT230 Marketing Management/Lecture, Discussion

Surveys the role of marketing in business and society. Topics include the marketing environment, marketing research and information systems, consumer behavior, the organizational consumer, products, pricing, distribution, promotion, international service and nonprofit marketing. Prerequisites: ECON010; MGMT100; juniors and seniors only. Staff/Offered every semester

MGMT231 Marketing Research/Lecture, Discussion
Marketing research focuses on consumer behavior and retail advertising. Topics include primary and secondary data collection, questionnaires for attitude and awareness surveys, mail and phone surveys, personal interviews, focus groups and data-analysis techniques. Prerequisites: MGMT230; juniors and seniors only. Staff/Offered periodically

MGMT234 Consumer Behavior/Lecture, Discussion
Examines how people search for, purchase, use, evaluate and dispose of the products, services and ideas they expect to satisfy their needs. Emphasizes the issues of market segmentation and the diffusion of innovations. Ethical, legal and public-policy issues are also discussed. Prerequisites: MGMT230; juniors and seniors only. Staff/Offered periodically

MGMT236 Retailing Management
Gives a general analysis of the structure of retailing emphasizing the retailing environment and operating efficiencies; includes patronage behavior, merchandise control, pricing, promotion, location, and vendor relations; and gives special attention to emerging trends in retailing. Prerequisite or concurrent: MGMT230. Credit: 1 unit (undergraduate)

MGMT240 Corporate Finance/Lecture, Discussion
Examines financial decision making by the internal financial manager. A study is made of valuation, cost of capital, capital structure, capital budgeting and financial analysis. Prerequisites: ECON010; MATH113 or 120; MGMT100, 101; juniors and seniors only. Staff/Offered every semester

MGMT242 Investments/Lecture, Discussion
Covers investment principles, market behavior and investment strategy. Investment principles include portfolio selection, fundamental analysis, portfolio theory, debt instruments and money markets, the stock-option market and alternative investments. Prerequisites: MGMT240; juniors and seniors only. Staff/Offered periodically

MGMT245 Social Entrepreneurship
This course is designed to introduce students to the complex dynamics underlying social entrepreneurship, of the use of business entrepreneurial skills as a means of creatively responding to societal problems. It challenges the student to look beyond well-established business objectives—the creation of wealth—and investigate how wealth creation can impact public good. An investigation of global social entrepreneurial initiatives is also an important focus of the course. Credit: 1 unit (undergraduate)

MGMT250 Operations Management/Lecture, Discussion
Provides overview of operations-management systems, emphasizing model building and applications. Topics include forecasting, quality control, inventory management, material requirement planning, machine loading, job sequencing and scheduling, project management and control, decision theory and linear programming. Prerequisites: ECON160 or PSYC105; MGMT100; MATH113 or 120; juniors and seniors only. Staff/Offered every semester

MGMT252 Corporate Environmental Management
This course will present many of the issues facing business and industry with relation to the natural environment. Topics such as external competitive pressures, internal strategic planning and positioning, corporate social responsibility, and stakeholder theory will be examined from a corporate environmental perspective. Case-study analysis, readings, speakers, videos and facility tours will be the methods of study. Prerequisite: juniors and seniors only. Staff/Offered periodically

MGMT260 Applying the Art and Science of Management
This course serves as a complement to MGMT100, in that it offers a multidisciplinary and cross-functional consideration of the firm in its environment. The purpose of the course is two-fold: to give students various opportunities to integrate and apply the knowledge gained in the management major and to help students understand the roles and responsibilities of business organizations in the external environment. In this course, students will focus on the development of professional skills and will create a portfolio of accomplishments to assist in their careers. This course is required for all majors, serves as a capstone and must be taken during the senior year. Prerequisites: MGMT210, 230, 240, 250; seniors only. Staff/Offered every fall and spring semester

MGMT262 Business Ethics and Law
The purpose of this course is to provide students with knowledge about the legal framework under which U.S. businesses operate and with an understanding of the ethical foundations of business decisions. An appreciation of the complex interactions between ethics and the law is the goal. The course will examine such topics as product safety, privacy, human rights, advertising, bribery, media, community relations and diversity. Fulfills the Values Perspective. Prerequisite: juniors and seniors only. Staff/Offered every spring semester

MGMT299 Internships/Directed Readings
Internships and directed readings, open to juniors and seniors only, are offered to qualified students upon application. They are limited to no more than one course credit each and do not count toward the management major or minor requirements. Students may take no more than two each of such courses in the Management Department. All MGMT299 courses must be approved by the Graduate School of Management program administrator or assistant dean.

ACCT4100 Foundations of Accounting
Managers use accounting data to measure and evaluate organizational performance and to make decisions. This course introduces accounting as the language of business by identifying and discussing principles and concepts. Topics include recording process, financial reporting and the application of accounting information in managerial decision processes. Students are provided opportunities to enhance their analytic skills through practice in compilation, reformulation and analysis of basic financial data. 14 weeks

ACCT5101 Financial Accounting and Reporting I
Accounting issues relevant to commercial organizations are numerous and complex. A set of accounting literature, referred to as Generally Accepted Accounting Principles or GAAP, guides the profession in the resolution of these issues. This course does not attempt to cover all GAAP, but rather provides a foundation for solving practical financial problems by introducing certain topics that are important in understanding the complexities of the business and financial world. The conceptual framework of accounting is discussed and then used as a basis to study accounting literature related to the recognition and measurement of current and noncurrent assets, current and noncurrent liabilities, stockholders' equity, and the development of income statements and balance sheets. (Prerequisite: ACCT4100 or U.S. accounting course) 14 weeks

ACCT5102 Financial Accounting and Reporting II

A continuation of Financial Accounting and Reporting I, this course addresses accounting literature guiding the profession in such areas as accounting for income taxes, pensions and postretirement benefits, and leases. The treatment of accounting changes and errors, the preparation of the statement of cash flows and the disclosure required in financial reporting are also discussed. Finally, advanced topics such as business combinations, consolidated financial statements and accounting for partnerships are addressed. (Prerequisite: ACCT4100 or U.S. accounting course) 14 weeks

ACCT5103 Management Accounting

This course covers the collection and analysis of cost data, methods of cost control and the relevance of various accounting data for managerial decision making in manufacturing and nonmanufacturing organizations. Topics include: activity-based costing and management, standard costing issues, decision making with management accounting data, budget analysis, new cost-management issues, and various cost-control and performance-evaluation issues. Typically offered every summer. (Prerequisite: ACCT4100 or U.S. accounting course) 14 weeks

ACCT5104 Accounting Information Systems

This course explains the various control and accounting procedures used in collecting, measuring, summarizing and reporting financial data generated by an organization's operating units. The course emphasizes procedural techniques and studies the flow of financial data through an organization's accounting system. (Prerequisite: ACCT4100 or U.S. accounting course) 14 weeks

ACCT5105 Financial and Operational Auditing

This course covers fundamental aspects of financial auditing including management's responsibility for financial statements, the legal liability of auditors, evaluation of internal control structures, substantive tests and tests of systems and audit reports. Operational auditing and current developments in environmental auditing are also covered. (Prerequisite: ACCT4100 or U.S. accounting course) 14 weeks

ACCT5107 Analysis of Financial Statements

The topics covered in this course are intended to increase skill levels in interpreting financial statements and reports, reconstructing and restructuring financial data, use of analytical techniques for financial-statement analysis and communicating financial results. Prerequisite: ACCT4100 or U.S. accounting course. May be taken as a finance elective FIN5107. 14 weeks

ACCT5108 Business Analysis and Valuation

This course examines accounting, finance, business strategy and financial forecasting and valuation concepts. The first part of the course develops methods and techniques, which are later used in the evaluation of equity and debt financing of corporations, analysis of acquisitions and mergers of companies, credit analysis, prediction of financial distress and bankruptcies, evaluation of corporate financial policies, and improvement of communication with investors and creditors of corporations. This case-oriented course emphasizes how to apply accounting, finance and business strategy concepts in practical situations. The course relies heavily on financial information analyses and will count as an accounting or finance elective in both the M.B.A. and M.S.F. programs. Prerequisite: ACCT4100 or U.S. accounting course. 14 weeks/Offered periodically

ACCT5109 Nonprofit Accounting

This course will discuss various accounting issues unique to nonprofit entities. We will first discuss general financial reporting (a bit of a review of ACCT4100) then bridge that knowledge to nonprofit organizations. In particular, we will look at financial accounting for state and local governments, voluntary health and welfare organizations, colleges and universities, and health-care organizations. We will also cover regulatory and taxation issues unique to nonprofits and then discuss audits of nonprofits and the costing of nonprofit services. The objective of the course is for you to develop a comprehensive understanding of these issues. Prerequisite: ACCT4100 or U.S. accounting course. 14 weeks

CAP5783 Global Business Seminar

See Management 5783.

CAP5784 Leadership and Decision Making in Organizations

The course offers an opportunity to reflect on how and why organizational leaders make operational or strategic decisions and on the context in which they are made. Course content includes presentations by executives, regular class sessions and several papers. All students will choose an aspect of organizational decision making as the focus of their work during the semester. Prerequisites: required core courses. 14 weeks

CAP5792 Management Consulting Projects

See Management 5792.

CAP5802 Entrepreneurship

See Management 5802.

COM4700 Management Communications

This course is designed to help managers communicate with confidence by showing them how to prepare clear, concise memos, letters, reports and proposals, as well as how to deliver effective oral presentations. Through active class participation and in-class writing exercises, students develop confidence in their ability to communicate effectively. Seven weeks

ECON4004 Management Economics

Managers of organizations—whether for profit, nonprofit or government agencies—face a common set of resource-allocation problems. This course will develop a student's ability to formulate and solve these problems, drawing upon the economic theories of consumer demand, the firm and industrial organization, as well as mathematical optimization techniques. It will provide a framework for analyzing the flexible multiproduct firm, as well as competitive and cooperative business situations from a strategic (game theoretic) perspective. Topics to be surveyed include: demand analysis, production and cost analyses, flexible manufacturing, market structure and strategic behavior, pricing practices, government regulation and decision making under uncertainty. Prerequisite: MATH4003 or math entrance requirement fulfilled. Seven weeks

FIN4200 Financial Management

Managers invest to optimize the size and timing of future cash flows and to minimize accompanying risks with the goal of increasing firm value. The other major decisions of optimal capital structure and dividend policy are considered under this same goal. Additional topics include stock and bond valuation. Seven weeks.

FIN5201 Case Studies in Corporate Finance

This course extends the discussion from FIN4200 of the theoretical financial issues facing the corporation. The student is exposed to a more in-depth presentation of the underlying financial theories and gains practice applying these theories to actual problems either through case analyses or additional readings. Prerequisite: FIN4200. 14 weeks

FIN5203 Investment Strategies

Topics covered include investment principles, market behaviors and investment strategies. Students examine the types of risks associated with and the returns available from marketable securities. In addition to studying stocks and bonds, the course provides a risk-return analysis of alternative investment vehicles, such as options and futures. Views of investment professionals are presented to the class live and by video records. Prerequisites: FIN4200, FIN5301 and FIN5302. 14 weeks

FIN5204 Financial Institutions

This course provides an understanding of financial institutions and of the effects of the regulatory and tax environments on the operation of these institutions. The special requirements of financial intermediaries are examined in relation to market participants such as investors and corporations. Prerequisite: FIN4200. Seven weeks/Offered periodically

FIN5205 Real Estate Finance

The objective of this course is to provide an introduction to and develop an understanding of real property finance and asset management. In order to accomplish this, a working vocabulary and understanding of certain functional areas in real estate industry will be integrated into the course. The major functional areas include property analysis, structuring ownership, negotiation, development and management structure. There will also be an in depth look at the knowledge behind financial structure, physical plant, the people involved and the environment. The primary focus of this course is to provide a framework for decision making in real property business, taking into account all the functional areas. Prerequisite: FIN4200. 14 weeks

FIN5206 Tax Strategies and Management Decisions

This course covers the fundamentals of individual and corporate taxation including an analysis of tax policy, structure, legal hierarchy and procedure, as well as a discussion of tax aspects of the various common forms of business organizations, and an examination of tax considerations in implementing employee benefit plans. The basic foundations of international tax are addressed. Cases emphasize the necessity of considering the impact of federal taxes in management decisions. Students perform a tax compliance and planning project. 14 weeks

FIN5207 Advanced Derivatives

Although the quantity and complexity of derivative securities has exploded in recent years, there are basic mathematical tools that can be used to accurately place a value on any derivative, no matter how complex. This course focuses on learning these tools and understanding how they are applied to standard derivatives such as futures, options and swaps. The course will also focus on applying these tools to current financial engineering problems. Prerequisite: FIN5302. 14 weeks

FIN5208 Fixed-Income Securities

This course examines fixed-income securities like U.S. Treasury bills, notes, bonds, corporate bonds and mortgages and then analyzes some of the derivatives based upon these securities. The theory of valuation for fixed-income securities is presented along with models of the term structure of interest rates. Much of the course is devoted to using personal computers to model the term structure as a basis for valuation. Prerequisite: FIN5302. 14 weeks

FIN5281 Case Studies in International Finance

The focus is on specific problems encountered by financial managers in corporations having international financial functions. Although international capital budgeting and financing in a global environment are covered, the major emphasis is on managing foreign-exchange risk. Prerequisite: FIN4200. 14 weeks

FIN5301 Stock and Bond Valuation

This course provides an introduction to investment theory and security valuation. Surveys techniques for stock and bond valuation, including dividend discount models, capital-asset pricing models, multiple-stage growth and term structure models. Prerequisite: FIN4200. Seven weeks

FIN5302 Quantitative Techniques for Derivatives Valuation

This course focuses on methods of pricing options, futures contracts, forward contracts and swaps. Models include the binomial and Black-Scholes models for options and arbitrage-free models for forwards, futures and swaps. Prerequisites: FIN4200 or FIN5301. Seven weeks

FIN5303 Financial Modeling

In this course students will implement financial models via the computer. The models are drawn from various finance areas such as corporate finance, fixed-income securities, investments and derivatives. The emphasis is not on the models, per se, but on the implementation. It is often true, however, that a complete understanding of the models comes through using them for computations. The models will be introduced through lecture and discussion. The idea is that students will leave the class fully capable of programming basic financial models in a spreadsheet. This training should prepare the student for many applications in the finance field. There appears to be a growing demand for people who have the practical skills of financial modeling. Since not all students will have the same finance background, however, another objective will be to fill in finance deficiencies in some small way as we discuss models from various areas. Thus, this course is the type of course that, perhaps, could just as easily be taught as a first course in finance or a last course in finance. In sum, students should be able to implement finance theory in spreadsheet models for a number of different practitioner applications. Prerequisite: FIN4200. Seven weeks/Offered periodically

FIN5304 Game Theory

This half-term course examines the choices that we make which affect others and the choices others make that affect us. Such situations are known as "games." Game theory has traditionally been a tool of economists, but its use in management situations is growing. Managers frequently play "games" both within the firm and outside it. Managers must account for the reactions of rival firms, subordinates and superiors to the various proposals of the managers. The goal of this course is to enhance a student's ability to think strategically in interactive environments. Knowledge of game theory will give students an advantage in such settings. Prerequisite: FIN4200. 7 weeks/Offered periodically

FIN5305 Technical Analysis

The focus of this course is how investors might use past market data to forecast future asset prices. This methodology is opposed to fundamental analysis, which depends on past accounting data for predictions of future prices. The class will examine popular methods of technical analysis and try to forecast prices using these methods on actual data. Speculative trading techniques such as entering trades via various types of orders, protecting by stop-loss orders and pyramiding of positions will be presented. The course will discuss the fit of technical analysis into the efficient markets hypothesis and into current finance theory. This course is offered as a special topics class and counts as a finance elective in both the M.B.A. and M.S.F. programs. Prerequisite: FIN4200. Seven weeks/Offered periodically

FIN5309 FINANCIAL ECONOMETRICS

This course provides a survey of common statistical techniques employed in financial research, including linear regression, factor models, time-series models and forecasting models. Prerequisite: FIN4200. Seven weeks

FIN5310 CASE STUDIES IN DERIVATIVES

The goal of this course is a thorough exploration of the risk-management process. This decision involves identifying and quantifying the risk to be transferred, selecting the means of transferring the risk and implementing the risk-management decision. Risk management is only partly a quantitative field. Strategy, negotiation, marketing and basic financial management are important as well. This course will focus on several important areas: (1) understanding the players in the market for financial risk; the buyers and sellers of risk, and the various intermediaries and (2) making a risk-management decision with only limited information about the true risks a firm faces. Prerequisite: FIN5302. 14 weeks

FIN5311 PORTFOLIO MANAGEMENT

This course covers such topics as passive- and active-portfolio management, performance measurement, descriptions of investment companies, and diversification to include international investments and nonfinancial assets. Prerequisite: FIN5301 is recommended. Seven weeks

MGMT4301 CREATING EFFECTIVE ORGANIZATIONS: STRATEGIC DECISION MAKING

This course focuses on the formulation and implementation of strategy at both the business and corporate level. Using an integrative approach that combines both the science and the art of strategy, the course introduces students to the tools that are used to assess an organization's internal and external environment, and to the process of strategic thinking. 14 weeks.

MGMT4302 CREATING EFFECTIVE ORGANIZATIONS: LEADERSHIP

This course is designed to provide students with the knowledge, skills and abilities needed to exercise leadership in today's global organizations. Students will gain the tools needed to lead organizational members towards the attainment of individual, team and organizational goals. Topics include establishing effective interpersonal relationships, managing cultural differences, motivating others, building and maintaining effective teams, exercising leadership and influence, creating effective organizational structures and processes, and managing change. Course readings and highly interactive classroom activities (case studies and exercises) will be used to enhance students' leadership skills. 14 weeks

MGMT4701 ORGANIZATIONAL COMMUNICATION

This course is designed to increase students' knowledge of the theory and practice of communication in organizations. Topics include interpersonal communication issues, including the effects of culture, status and gender, and organizational issues such as crisis communication and public relations. Much of the course is devoted to skill development, emphasizing both written and oral presentations. Seven weeks

MGMT4707 INTERNATIONAL MANAGEMENT AND GLOBAL COMPETITION

This course addresses core management issues from the international perspective. Business policy, competitive strategy, organizational and control mechanisms, business modes and operations are thus covered from the perspective of global business. Geographic diversity and geographical influences are at the heart of the global economy. The diverse cultural, economic and political environments facing the business manager are unique dimensions that make up the foundation of the new course. Prerequisites: ECON4004, MGMT4301, MGMT4302 Seven weeks

MGMT4708 BUSINESS LAW

This course provides complete coverage of business law with a focus on contemporary, ethical, international and technology issues. This course recognizes the importance of the application of court decisions, statutes and government regulation to business and making business decisions in a global market. Seven weeks

MGMT4709 BUSINESS IN SOCIETY

This course combines the study of business ethics with the consideration of business in its social, technological, political and natural environments. Personal values and their function in organizational settings are the focus of the first half of the course, while the second half examines corporate responsibility and stakeholder management in the international contest. The emphasis throughout is on creative managerial decision making, with analytic and implementation skills developed through case discussion, case writing and class presentations. Seven weeks

MGMT4712 INTERNATIONAL TRANSACTIONS

This course is designed to elevate the knowledge and understanding of a variety of subjects contained inside the world of International Business Transactions. Some of these subjects include: world trade, international enterprises, treatment of "goods" in international markets, European Economic Community, business in Asia, regulations on imports and exports, currency exchange, international technology transfers, protection of intellectual-property rights, and litigation and arbitration in the international market. This course fulfills either the business-law requirement or a concentration elective (Management or Global Business) but cannot be used for both an elective and the law requirement. Seven weeks

MGMT5302 MANAGING CHANGE AND CONFLICT

Change and conflict are inevitable, as organizations enter the 21st century and face globalization, technological innovation and demographic change. This course will address the challenge of managing conflict and change from a pragmatic perspective. Formal organization development interventions will be discussed, as well as the day-to-day changes that every manager experiences. Concepts such as employee involvement, organization culture, power and politics and the learning organization will be introduced and applied. Course requirements include planning an actual organizational change, oral and written case analyses and active participation. Prerequisite: MGMT4301, MGMT4302. Seven weeks/Offered periodically

MGMT5304 NEGOTIATION AND CONFLICT RESOLUTION

This skill-building course is designed to help students improve their negotiation and dispute-resolution techniques. Students will study the psychological concepts and theories of negotiation. They will also explore their own personal negotiation and conflict-resolution styles. The course relies heavily on the use of role-playing exercises, case studies and class discussions. Topics studied will include distributive and integrative bargaining, communication and persuasion, power, conflict and intergroup/international negotiation. Prerequisite: MGMT4302. Seven weeks

MGMT5305 Industrial Relations

Broadly defined, industrial relations refers to the relationships between employees and employers, through union representatives. This course serves as an introduction to the concepts, theories and practice of labor-management relations. Topics include: the development of the trade-union movement; union structure, government and growth; the practice of collective bargaining; the administration of the collective-bargaining agreement; dispute-resolution procedures; and the legal framework of labor relations. Seven weeks

MGMT5306 Diversity in the Workplace

The race and gender composition of the U.S. workforce has become increasingly diverse in recent years. Drawing on research in organizational behavior, psychology and sociology, this course explores the complex dynamics that underlie interpersonal interactions in diverse organizations. Students will examine the past and present experiences of members of different race and gender groups in the U.S. workplace. Finally, students will consider how organizations can manage diversity in a manner that fully utilizes the talents of all members of the workforce. Male and female students of all racial/ethnic backgrounds are encouraged to enroll. Prerequisite: MGMT4302. Seven weeks

MGMT5401 The Contemporary Workplace

This course examines contemporary issues in employment. Topics include downsizing the workforce, discrimination in selection and employment, sexual harassment, employee rights and responsibilities, the employment of part-time, temporary and home workers, new forms of compensation, the frontiers of union organizing, and human-resource management in the global economy. Through the discussion of selected readings and cases as well as class debates, students develop an appreciation of the complexity and importance of these and other emerging issues. Seven weeks/Offered periodically

MGMT5402 Discrimination in Employment

This course examines inappropriate and illegal discrimination in the contemporary workforce. Topics include discrimination in recruitment, selection and promotion, sexual harassment, the glass-ceiling effect and discrimination in compensation. Through the discussion of selected readings and cases as well as class debates, students develop an appreciation of the complexity and importance of these and other emerging issues. Seven weeks/Offered periodically

MGMT5406 Collective Bargaining

Collective bargaining is a process by which representatives of labor and management seek agreement on the terms and conditions of employment. The public often has a vested interest in the process, especially when conflicts over terms of employment cannot be resolved at the bargaining table. Topics covered include the evolution of bargaining, theories of bargaining power and behavior, and the impact of the law on the conduct and substance of bargaining. The range of bargaining issues is described, along with variations in bargaining structures. The grievance procedure is examined with respect to the application and interpretation of collective agreements. Students participate in a negotiation simulation and a collective-bargaining simulation. Seven weeks/Offered periodically

MGMT5407 International Labor Relations

This course provides an international perspective on labor relations by comparing labor-union activities, nonunion forms of worker representation and labor legislation in several countries. Topics include collective bargaining and wage determination, union growth, labor disputes, protection against unfair dismissal, grievance procedures and employee participation in management decision making. National trends are examined and compared through readings, case studies and presentations. Seven weeks

MGMT5543 Project Management

The course will cover tools and techniques necessary for successful completion of projects. Students will learn about project management concepts, needs identification, proposed solutions, risk assessment, project planning, scheduling, project control techniques, project team issues, communication, documentation and project management software. 7 weeks

MGMT5505 Greening the Corporation

When it comes to the natural environment, organizations have come under increasing scrutiny from a wide variety of stakeholders. How to manage organizational ecological and sustainability issues needs to consider these multiple stakeholders. Organizations may respond in a number of ways including proactive and reactive programs. This class will investigate the types of ecological pressures organizations face and how the organization can effectively respond to these pressures. We include issues that will be faced by the various organizational functions including accounting, finance, marketing, operations and human resource management dimensions.

MGMT5604 Services Management

This course provides students with the concepts and tools necessary to manage service operations effectively. The strategic focus should also provide students with the foundation to start their own service business. The course explores the dimensions of successful service firms, prepares students for enlightened management and suggests creative entrepreneurial opportunities. Beginning with the service encounter, service managers must blend marketing, technology, people and information to achieve a distinctive competitive advantage. This course looks at service management from an integrated viewpoint with a focus on customer satisfaction. The material will integrate operations, marketing, strategy, technology and organizational issues. 14 weeks/ Offered periodically

MGMT5606 Learning by Analogy

This course will use a variety of mediums (movies, art, literature, nature, poetry and music, among others) to explore management concepts. Students will be required to make presentations in each class session using the assigned medium as a basis for examining how organizations and the people in them function. The course focuses on developing an ability to think creatively about management and draw lessons from multiple venues. Prerequisite: MGMT4301, MGMT4302. Seven weeks/Offered periodically

MGMT5608 Corporate Responsibility

This course studies basic principles in corporate responsibility and will include some significant fundamental legal concepts. The course will explore the tensions between the corporate executive's duty of loyalty to the corporation and ethical boundaries in approaching their work. Other concepts covered will include civil enforcement of corporate law violations, corporate crimes, violations with the Securities and Exchange Commission, the liabilities of accountants, corporate compliance and policy initiatives. Case studies which illustrate the various principles involved in corporate law and ethics will be discussed. Seven weeks

MGMT5782 Doing Business in Northern Europe
This course is offered at Vaxjo University in Sweden. Students attend the course for approximately one month in late spring. Students earn one course unit and will study topics covering the business environment and business practices in northern Europe. Lectures, discussion seminars and company visits are the format of this course. Students are graded through presentation and discussion of a written report on a subject related to the content of the program. Information sessions are held each spring semester. Contact GSOM academic affairs for more detailed information.

MGMT5783 Global Business Seminar
This intensive course combines lectures, readings and discussion at Clark University with a week of instruction by Clark faculty and resident business executives and guest lecturers in a foreign capital city. Current global business events are examined in the context of economic and political policy and management experience. Several class sessions are held on campus, followed by a week of seminars and Weld trips in a foreign center of commerce. Prerequisites: required core courses. Also offered as CAP5783. 14 weeks

MGMT5784 Advanced Topics: Global Teams
Advanced Topics in Teams explores the intriguing and challenging issues surrounding the use of teams in today's global organizations. This elective course goes beyond the introductory material covered in the managing-teams module of Creating Effective Organizations. It focuses on the challenges faced by global teams comprised of members from different regions of the world, as well as by virtual teams that rely primarily on electronic rather that face-to-face interaction. The course is designed to give you the skills needed to build and maintain effective global/virtual teams. Course topics include designing global/virtual teams, managing interpersonal processes and conflict within global/virtual teams, and using technology to enhance team performance. Class meetings will be highly interactive; activities will include case discussions and two virtual (electronic) team exercises. The course is included in the Global Business Concentration. Prerequisite: MGMT4302. Seven weeks/Offered periodically

MGMT5792 Management Consulting Projects
This course is organized around projects provided by a variety of profit and nonprofit organizations in central Massachusetts and Boston. Teams of three to four second-year M.B.A. students are invited to work in these organizations as consultants in training. Working with guidance from Clark faculty members and managers from the host organizations, the student teams analyze their assigned projects and recommend courses of action. Management, in turn, critically evaluates and responds to the students' analysis and recommendations, in much the same manner that they respond to proposals from their own staff. Prerequisites: required core courses. Also offered as CAP5792. 14 weeks

MGMT5802 Entrepreneurship
This course is aimed at providing individuals with the concepts and skills to recognize opportunities that others have overlooked, and to have the insight and knowledge to act where others have hesitated. The course is a product of experience—nearly two decades of research in this field and refinement in the classroom—and is rooted in real-world application. Major areas of concentration will include: opportunity identification and evaluation, forming the entrepreneurial team, managing resources, developing a business plan, financing the business and assessing entrepreneurship from a personal perspective. Prerequisites: required core courses. Also offered as CAP5802. 14 weeks

MGMT5900 Global Entrepreneurship
Entrepreneurial opportunities in international markets have exceptional possibilities. However, in these uncertain economic times, the potential risks are also significant. This course explores these entrepreneurial opportunities from a global perspective. The students will divide into teams and develop a feasibility study for starting a moderate-size venture in an international environment. The teams will work together and research the essential components of a feasibility study through traditional research, Internet research, e-mail correspondence, and, when possible, meet with appropriate counselor representatives. The students will also analyze written international case studies, give several brief presentations and present the final feasibility analysis as the term project. This course is offered as a special topics class. Prerequisites: FIN4201, MKT4401, and MGMT4301, MGMT4302. 14 weeks/Offered periodically

MIS4500 Management Information Systems
One of the most important aspects of computing, management information systems has had a significant effect on both operations and strategy. Information systems are employed at all levels of management to achieve competitive advantage and to create new opportunities, products and services. The objective of this course is to provide basic knowledge of the field of information systems. Topics include hardware, software, database management, data communication, systems analysis and design, and functional application areas such as medicine, accounting and manufacturing. 14 weeks

MIS5501 Database Management Systems
Database management systems play an important role in meeting the information needs of an organization. A poorly designed database may result in providing incomplete, wrong and anomalous information. The primary objective of this course is to study the techniques used in designing databases that provide the correct information to nontechnically oriented users. Other topics include distributed databases and expert systems. Prerequisite: MIS4500. Seven weeks

MIS5505 Management of Information Technologies
To effectively plan the Information Technology (IT) needs of an organization, managers must assess the impact of IT and the role it plays in the context of organizational strengths and goals. Through the use of case studies, this course is designed to provide students the insight required to make such appraisals. Prerequisite: MIS4500. 14 weeks

MIS5506 Knowledge Management in Organizations
Participants in this course will have the opportunity to study the behavioral, social, organizational, managerial and technical aspects of knowledge management and organizational learning, as well as practical applications of knowledge management systems within organizations. Knowledge management (KM) has been considered as a strategy for improving organizational performance through a set of processes, tools and incentives in order to create, share and integrate knowledge among individuals, teams and organizations. While professional service firms were the first to embrace the idea, KM efforts are now underway in virtually every industry. A wide variety of knowledge-centered initiatives fall under the KM umbrella. This course therefore intend to: (I) understand what KM is and how it can be used to improve organizational performance; (II) outline various IT solutions to facilitate the creation and sharing of explicit/tacit knowledge; and (III) explore the challenges associated with deploying these solutions and identify strategies and tactics for addressing these challenges. The course is participatory, and, as such, students will engage in active learning through discussion, simulation and case studies.

MIS5507 E-Commerce

This course focuses on the explosive field of Electronic Commerce. "E-commerce" is the buying and selling of goods and services on the Internet, especially the World Wide Web. This class is a complete introduction to the world of electronic commerce, including balanced coverage of technical and business topics. Case studies and plentiful business examples complement conceptual coverage to provide a real-world context. Implementation strategies are analyzed, using examples of both successful and unsuccessful implementations. Additionally, this course will prepare the student to understand the steps an organization must take to effectively use e-commerce to achieve a competitive advantage in this exciting and new marketplace. Students will develop Web pages of their own to market hypothetical products using either FrontPage 2000/1998 or hypertext markup language (HTML). This course is offered as a special topics class and will count as an elective in the MIS concentration. Prerequisite: MIS 4500. 14 weeks

MIS5513 Data Security and Privacy

Begins with an introduction to the basic concepts of data security both physical and logical. It continues with dealing with data security standards, the SSL and S-HTTP protocols; data integrity; data encryption; coding methods; the use of smart cards; assurances of financial transactions, payment methods of e-business and e-commerce; medical information security; and legal aspects of information security. Prerequisite: MIS4500. 14 weeks

MIS5523 Operating Systems

Developed as an introduction to operating systems' characteristics, designs and structures. Topics include a history of operating systems, concurrent processes and synchronization, coordination or asynchronous events, file systems, scheduling, deadlock resolution and memory management. Prerequisite: MIS4500. 14 weeks

MIS5533 Design and Analysis of Computer Networks

Designed as an overview of LAN/WAN; encoding digital and analog signals, asynchronous/synchronous protocols; ISDN, B-ISDN, TCP/IP, with a focus on modeling and analysis of networks and network protocols. Prerequisite: MIS4500. 14 weeks

MIS5543 Project Management

Analyzes the most important aspects of project management within the framework of organizational behavior and structure that can determine project management. Students will be required to learn to use Microsoft Project 2000, including planning a project, creating project schedules, communication, project information, using the critical path, assigning resources, tracking progress and sharing information across applications and the Web. Access to Microsoft Project 2000 software required. Prerequisite: MIS4500. Seven weeks or 14 weeks

MIS5553 Information Systems Analysis and Design

Surveys the methods of IS analysis and design for enterprises with data-processing capabilities. The focus will be on how to determine feasibility and system requirements, organizational and procedural requirements and how to best utilize database capabilities. Special emphasis will be given to user groups, such as how to develop a user profile; how to improve human/computer interaction. Prerequisite: MIS4500. 14 weeks

MIS5602 Decision Support Systems

Optimization modeling techniques can potentially be used to address a wide range of management problems. Application of these techniques in today's business environment requires robust, microcomputer-based software to solve the models. In this course, students learn various optimization modeling techniques; software for solving models; and cases of how companies have developed and used optimization-based decision support systems to address real-world problems. Prerequisite: OM4601. Seven weeks

MIS5604 Web-site Development

This course covers all aspects of Web-site design, from creative design to professional management. Electronic commerce issues will be looked at in-depth. Students will work with and learn HTML and Java Scripting, including the introductory components of CGI and Web Site Pro server hosting software. Students taking this class will need to have Web-server access with a minimum of 2 MB hosting space available through their ISP and should be familiar with personal computers. All work will be done using the Windows 95/98 operating systems. This course is offered as a special-topics class and will count as an elective in the MIS concentration. Prerequisite: MIS4500. 14 weeks

MKT4400 Marketing Management

This course provides the fundamental marketing principles and practices underlying a successful business enterprise. Students will learn the tools, concepts, analytical frameworks and skills for making marketing decisions and designing marketing programs. The course covers the processes and activities involved in effective marketing, as well as the strategic implications of being market driven. A fundamental goal of the course is to improve students' critical-thinking and decision-making skills by requiring students to make and defend marketing decisions in the context of realistic, case-oriented problem situations. Topics include: segmentation, targeting, positioning, competitive strategy, product development, pricing, promotion and distribution. Prerequisites: ECON4004, STAT4006. This is a required core course for all MBA students who did not receive a waiver in marketing. 14 weeks

MKT4402 Marketing Strategy and Simulation

This course utilizes a computer simulation to provide direct, hands-on experience of managing a business. Students apply concepts and strategies learned in prior marketing course work to a practical, real-world environment. Students will come to appreciate the importance and value of marketing as the primary competitive tool and will gain direct exposure to the opportunities, challenges, problems and decisions involved in market-driven management. They will also learn the importance of making trade-offs in finding the optimal combination of marketing mix elements (and product/inventory decision) necessary to run a successful business enterprise. Experiential learning from the competitive game may be supplemented by case discussions and readings on competitive marketing strategy development. Prerequisite: waiver in Marketing. This is a required core course only for MBA students who received a waiver in marketing. 7 weeks

MKT5401 Marketing Research

This course examines the basic concepts and techniques used in marketing research as a problem-solving aid in decision making in marketing. Problem definition, research design, types of information and measurement scales, and evaluation and utilization of secondary data with emphasis on electronic access are discussed. Students are trained in the basic methods of primary data collection, including structured and unstructured interviews, focus groups and surveys. Practical and intensive applications on sample size, questionnaire design, data analyses and interpretation are emphasized, as well as discussion of advanced multivariate techniques for inputting and analyzing data using the SPSS statistical package. Prerequisite: MKT4400 or MKT4402, STAT4006. 14 weeks

MKT5402 CONSUMER AND INDUSTRIAL BUYER BEHAVIOR
Understanding consumer behavior is essential to defining and maintaining a market. This course examines the purchasing behavior of individuals and groups. Topics include: complex decision-making models, buying habits, attitude theory and the buying behavior of organizations. Prerequisite: MKT4400 or MKT4402. 14 weeks

MKT5403 ADVERTISING AND PROMOTION
Promotion, a component of the marketing mix, is any form of communication intended to inform, persuade or remind people of products or services. Advertising is any form of impersonal communication of ideas, goods or services paid for by an identified sponsor and is one of the major types of promotion. The course focuses on advertising and publicity as the most common and useful forms of promotion. The course integrates international, legal and ethical aspects of promotion and covers topics such as media selection, public relations and personal selling. Prerequisite: MKT4400 or MKT4402. 14 weeks

MKT5405 BUSINESS-TO-BUSINESS MARKETING
Organizations that market to other organizations encounter different problems than those that market to consumers. Business-to-business marketing is the marketing of goods and services to commercial enterprises, governments and nonprofit institutions. Emphasis is on the buyer behavior and the more complex decision-making processes of organizations. Topics covered include industrial market segmentation, product development, pricing, personal selling, promotion and distribution. Additional topics are direct marketing, research and development, purchasing and corporate planning. Prerequisite: MKT4400 or MKT4402. 14 weeks/Offered periodically

MKT5406 MARKET PRICING
A pricing strategy should be consistent with and reflect overall company objectives. Companies can use pricing strategies to gain market share, meet profit goals or maintain the status quo. Companies may pursue more than one pricing objective at the same time and often reexamine pricing strategy in light of changes in the competitive environment. This course presents a management approach to pricing products and services in consumer, industrial and reseller markets. Topics include: bargaining tactics, bidding strategies, pricing product lines for complex channels of distribution, life cycle and learning-curve pricing, and intrafirm transfer pricing. Prerequisite: MKT4400 or MKT4402. 14 weeks/Offered periodically

MKT5407 SERVICES MARKETING
Highly competitive markets for profit and nonprofit service organizations require strict attention to the production/marketing interface, as well as to the traditional marketing mix. The course focuses on the marketing implications of service intangibility, the inseparability of production and consumption and conflicting server roles. These problems apply to a wide array of service organizations, including retailing and health care. Current models of the service organization are presented with insight developed through readings, cases and interviews. Prerequisite: MKT4400 or MKT4402. 14 weeks/Offered periodically

MKT5482 INTERNATIONAL MARKETING
This course examines the problems that firms encounter as they enter international markets. The text and readings explore marketing problems facing joint venture and multinational firms, as well as the exporter and licensor. A range of marketing activities is covered in the context of international operations, including marketing research, product policy, pricing, distribution, promotion, planning, organization and control. Prerequisites: MKT4400 or MKT 4402; MGMT4707. 14 weeks

MKT5485 PERSONAL SELLING/SALES MANAGEMENT
This course provides an overview of the fundamental theory and principles underlying the personal selling process, as well as sales management. Through numerous "role plays," in-class exercises, and a sales management simulation, emphasis will be placed on the practical application of this theory to real-world marketing situations. The learning environment will involve both individual (role-plays; in-class exercises) and group (simulation) settings. The first class period will be an introductory session. You will be exposed to both fundamentals of personal selling and the sales management process. The second class period will be devoted to an examination of the sales management process in detail. Students will also be divided into teams and exposed to the MARS Sales Management simulation (available online at shootformars.com). Approximately 45 minutes of each class period thereafter will be devoted to working (in groups) on the sales management simulation. The remaining class time (class periods 3-7) will be devoted to the personal selling process. Thus, in this class a greater emphasis is placed on developing individual personal selling skills than on managing a sales force. Prerequisite: MKT 4400 or MKT 4402. Seven weeks/Offered periodically

MKT5486 BRANDING STRATEGIES
Brands are everywhere. Name a product category and a brand name is likely to be the first thing that comes to mind. These brands do not merely mark the origins of the companies, products and services. They elicit our most deeply held beliefs, desires and aspirations. A strong brand can be a company's most effective competitive tool and strongest platform for growth, commanding premium prices among customers and investors alike. Branding building has many dimensions: aesthetic, experiential, social, financial, organizational and cultural. In this course, students will explore the dimensions of brands, and examine the process by which great brands are created, built and maintained. Prerequisite: MKT 4400 or MKT 4402. 14 weeks

MKT5494 PRODUCT MARKETING
The objective of this course is to prepare students to be effective product managers. Corporations often sell hundreds of individual and related products by giving marketing responsibility to product managers. Product managers are the champions of their product line; they develop marketing plans, see that they are implemented, monitor results, and take corrective action. This course develops conceptual and decision-making skills in marketing planning, product development and modification, product positioning and promotion, forecasting and budgeting. Prerequisite: MKT 4400 or MKT 4402. 14 weeks/Offered periodically

OM4601 OPERATIONS MANAGEMENT
Operations management involves the efficient use of resources to create goods or services that satisfy the needs of customers and clients. In both the profit and nonprofit sectors, successful management requires economically rational decisions regarding the design and operation of processes that transform such resources into goods or services. The course develops students' abilities to identify and structure operating problems and to identify appropriate techniques for resolving them. Examples of topics covered include: modeling concepts and LP modeling/solution methods, basic forecasting methods, location selection, inventory management, MRP, JIT, quality management/assurance,

project management and control. Prerequisites: STAT4006, MIS4501. Seven weeks

OM5601 Optimization for Managers

This course provides an overview of important, practical tools that have been used to solve management problems. Explanation of the fundamental ideas behind these techniques will help students to apply them intelligently and flexibly to situations in the real world. Examples of the techniques are heuristics, simulation, shortest path, network models, dynamic programming, and so on. Thanks to desktop computers and user-friendly software, managers can now use these techniques themselves, a particularly attractive feature for small entrepreneurial firms. Prerequisite: OM4601. Seven weeks or 14 weeks/Offered periodically

STAT4005 Statistical Methods

This is a first course in applied statistics. No prior knowledge of statistics is assumed. The course is divided into two sections. The first section covers the basics of data analysis and presentation, probability theory and applied probability. The second section covers confidence tests and statistical regression. There are exams after each section. Seven weeks

STAT4006 Management Decision Models

This course focuses on model building using multiple regression analysis. The resulting models are used to aid management decision making. Exercises and cases involve a wide range of management problems. Prerequisite: STAT4005. Seven weeks

MATHEMATICS

Program Faculty

Frederic Green, Ph.D. - Chair
Jerry Breecher, Ph.D.
Arthur Chou, Ph.D.
Li Han, Ph.D.
David Joyce, Ph.D.
John Kennison, Ph.D.
Lawrence Morris, Ph.D.
Lee Rudolph, Ph.D.
Natalia Sternberg, Ph.D.
Ping Xuan, Ph.D.

Visiting Faculty

Herman Servatius, Ph.D.

Program Overview

The department supports undergraduate majors and minors in computer science and in mathematics. The computer science program is described in the computer-science portion of this catalog. The department also offers courses that play an important role in other disciplines.

In keeping with liberal-arts traditions, Clark's mathematics major provides a solid education in mathematical principles for students who wish to apply mathematics in other fields and students who wish to pursue mathematics in graduate school. Clark mathematics majors have gone on to graduate school in pure mathematics, applied mathematics and computer science at such universities as Brown, Cornell, NYU (Courant Institute), and Stonybrook. Graduates are employed in the public and private sectors as statisticians, mathematical modellers and actuaries, as well as teachers from the elementary to university level.

The mathematics major, built around a core of fundamental courses, is best started early with calculus (MATH120-121 or MATH124-125) in the first year. Advanced electives provide some flexibility and allow students to tailor the major to their needs. Following the description of the requirements are suggestions for concentrations in pure mathematics, applied mathematics and actuarial science.

Undergraduate Requirements

The Mathematics Major: Department faculty are eager to help students select courses. If a major has not been declared earlier, it must be declared by the end of the sophomore year. Students should choose an academic adviser from the department faculty as early as possible, and in any case by the end of the sophomore year. Entering students enrolled in first-year seminars in programs outside mathematics, computer science or the natural sciences are especially encouraged to make a prompt choice of an unofficial secondary adviser in the Mathematics Department, who will be able to supplement the advice offered by their primary adviser.

Suggested Specializations in Mathematics

Pure mathematics is the study of mathematics as an end in itself. Many students are originally attracted to mathematics because of its powerful applications, but a taste for pure mathematics often develops after studying the subject. Students planning to study mathematics in graduate school should consider programs in either pure or applied mathematics. Suggested courses: MATH214 Modern Analysis; MATH216 Complex Analysis; MATH226 Modern Algebra II; and MATH228 Topology.

Applied mathematics is the study of mathematics as applied to the natural or social sciences. The heart of the field is modeling—translating aspects of natural or social phenomena into mathematical objects that can be studied with such mathematical tools as differential equations, linear systems and stochastic processes. Suggested courses: MATH212 Numerical Analysis; MATH214 Modern Analysis; MATH216 Complex Analysis; MATH217-218 Probability and Statistics and Topics in Statistics; and MATH244 Differential Equations.

Actuarial science is the study of finance and insurance. Study in this field requires a grounding in mathematics and statistics and an understanding of economics and business management. Suggested courses: MATH212 Numerical Analysis; MATH217-218 Probability and Statistics and Topics in Statistics; MATH244 Differential Equations; and appropriate courses in economics or business management.

Secondary Education Certificate in Mathematics Education

Certificate requirements include courses in education and in mathematics. Consult the Education Department for information on required courses in education and the most recent state guidelines. The mathematics department recommends the completion of a regular mathematics major, with MATH126 Elementary Number Theory and MATH128 Modern Geometry included as the two elective Breadth Courses.

Mathematical Services

The Mathematics Department offers courses to help students using mathematics as a tool for studying other areas; see MATH113 Mathematical Problem Solving and MATH217-218 Probability and Statistics, and Topics in Statistics. Outside the department, COPACE offers IDND017 Foundations of Quantitative Thinking.

Calculus

Calculus is an essential tool for every serious student of mathematics or the natural sciences. It also is used in economics and other disciplines. The Mathematics Department offers two calculus tracks: MATH120-121-122 and MATH124-125

Both tracks are open to first-year students with appropriate scores on the placement test. MATH124 is geared towards students who have had prior experience with (regular and AP) calculus. Strong students in the physical sciences are urged to start with MATH124. The Mathematics Department generally recommends that even students with a high AP score take MATH124. In exceptional circumstances, first-year students may enroll in MATH130.

Mathematics Placement Test

All students who intend to take mathematics courses or who need to satisfy the University's mathematics proficiency requirement (with the exception of students with advanced-placement credit in calculus) must take the mathematics placement test given during orientation and preregistration. Based on placement test scores, some students will be required to pass IDND017 Foundations of Quantitative Thinking, offered through COPACE before they enroll in a formal-analysis course. Other students, who place at levels ranging from precalculus through MATH124, must begin in a course corresponding to their placement test scores. This course must not be higher or lower than the test score indicates. Students may challenge their placement by taking backup placement tests.

Core Courses

These courses are prerequisites for the advanced courses and should be taken as soon as possible.

- Calculus sequence (MATH120-121-122 or MATH124-125)
- MATH130 Linear Algebra
- MATH131 Multivariate Calculus
- MATH172 Introduction to Modern Analysis

Breadth Courses

- MATH225 Modern Algebra
- Two math electives (MATH105, 114, 115, or any courses beyond MATH125)

Depth Courses

Four additional courses at the 200 level, one a capstone course to be selected with the major adviser (internships and reading courses will meet this requirement only with departmental approval.)

(Total of 12 or 13 courses, depending on student's choice of calculus sequence. Note: MATH110 Diving into Research cannot be used to satisfy the requirements of the major.)

Reading Courses

Reading courses on special topics may be arranged with the permission of a member of the departmental faculty who will serve as supervisor. Departmental policy requires that a reading course can only be taken Pass/No Credit. Reading courses may not be substituted for 200-level courses to fulfill departmental requirements.

Honors Program

A major who maintains at least a 3.2 average (4.0 scale) in courses required for the major may apply for the departmental honors program. A student's application in writing must be directed to a prospective honors adviser or the department chair by the end of the student's junior year. Honors may be achieved in one of two ways:

1. A unified four-course sequence as a senior (some parts of which may consist of reading courses), followed by a comprehensive examination.
2. An honors project to be presented at an oral defense or at a department seminar. This project may be an independent or joint research thesis, or it may be a programming project. Supporting course work may be required. Students interested in pursuing the honors program should consult their department adviser. The student registers for MATH299, Sec. 8, for course credit for an honors thesis.

Upon satisfactory completion of the program, the department may recommend graduation with honors, high honors or highest honors.

Mathematics Minor

The mathematics minor consists of the following: calculus sequence (MATH120-121-122 or MATH124-125); MATH130 Linear Algebra; MATH131 Multivariate Calculus; and two other mathematics courses (excluding MATH113 and MATH119), at least one of which must be 200 level. (Reading courses and internships are accepted only with departmental approval.) The two elective courses depend on the student's interest. For instance, a student interested in the physical sciences could take MATH172 Introduction to Modern Analysis and MATH244 Differential Equations, while MATH217-218 Probability and Statistics, and Topics in Statistics might be more appropriate for social sciences. See the department for further suggestions. Total: six or seven courses, depending on student's choice of calculus sequence.

Courses

ECON360 Probability and Statistics/Lecture
See Mathematics 217.

MATH105 History of Mathematics/Lecture, Discussion
Explores major themes—calculation, number, geometry, algebra, infinity—and their historical development in civilizations ranging from the antiquity of Babylonia and Egypt through classical Greece, the Middle and Far East and then modern Europe. Analyzes the tension between applications of mathematics and the tendency toward formalism. Emphasizes presentations and discussions. Fulfills the Historical Perspective. Mr. Joyce/Offered periodically

MATH110 Diving into Research: Mathematics Behind Plasmas
Plasma televisions, plasma lights, the heat around the space shuttle and communication blackout caused by plasma, laser treatments in medicine, and production of microchips for computers are just a few applications of plasmas that have become a big part of our lives. Students will learn about plasmas by developing and studying mathematical models that explain the experiments and help to obtain plasmas with certain properties. Note: the yearlong course is 0.5 credit per semester, and the full year is necessary to obtain credit. MATH110 does not satisfy any requirement of the Math major.

MATH111 Diving into Mathematical Research
See MATH110.

MATH113 MATHEMATICAL PROBLEM SOLVING/LECTURE, WORKSHOP

Intended for students who will use mathematics in such subjects as management and the social sciences, but who are not necessarily planning to go on to calculus. MATH113 cannot be used as a prerequisite for either calculus sequence, and does not satisfy any requirement of either the major or the minor in mathematics or computer science. Covers some precalculus topics (algebraic manipulations, functions and graphs, exponentials and logarithms), but major emphasis is on mathematical analysis of concrete situations (word problems, mathematical modeling, exponential growth, applications of linear systems, elementary probability). Prerequisites: A suitable score on the mathematics placement test. Staff/Offered every semester

MATH114 DISCRETE MATHEMATICS/LECTURE

Covers mathematical structures that naturally arise in computer science. Includes elementary logic and set theory, equivalence relations, functions, counting arguments, asymptotic complexity, inductively defined sets, recursion, graphs and trees, Boolean algebra and combinatorial circuits, finite state automata, and diagonalization and countability arguments. Emphasizes proofs and problem solving. Prerequisite: One semester of calculus (MATH120 or 124) or CSCI120. Mr. Chou, Mr. Green, Mr. Joyce/Offered every semester

MATH119 PRECALCULUS MATHEMATICS/LECTURE, DISCUSSION

Intended for students who plan to go on to calculus. MATH119 is to be used, when necessary, as preparation for MATH120 or MATH124 and does not satisfy any requirement of either the major or the minor in mathematics or computer science. Students should have a solid grasp of elementary algebra. Covers more advanced algebraic techniques (linear and nonlinear inequalities, quadratic equations, linear systems) and gives a rigorous look at elementary functions (polynomial, exponential, logarithmic, trigonometric). Prerequisites: A suitable score on the mathematics placement test. Staff/Offered every spring

MATH120 CALCULUS I/LECTURE

Calculus is essential for majors in biology, chemistry, computer science, mathematics, physics, and environmental science and policy. Part I includes functions, limits, continuity, differentiation of algebraic and trigonometric functions, mean-value theorem and various applications. Part II includes Riemann sums and integrals, techniques and applications of integration, improper integrals, transcendental functions (logarithms, exponential functions and inverse trigonometric functions). Part III includes further topics from calculus proper (sequences, series, polar coordinates) and introduces linear algebra (vectors, matrices and linear systems). Though not all results are derived rigorously, care is taken to distinguish intuitive arguments from rigorous proofs. MATH120, 121 and 122 fulfill the formal-analysis requirement. MATH122 is a prerequisite for MATH131 for students who have taken MATH120, 121. Prerequisite for MATH120: appropriate score on the mathematics placement test or appropriate grade in MATH119. Mr. Joyce, Mr. Rudolph, Staff/Offered every fall (120, 122) and spring (121)

MATH121 CALCULUS II/LECTURE

See MATH120.

MATH122 CALCULUS III/LECTURE

See MATH120.

MATH124 HONORS CALCULUS I/LECTURE

Two-course sequence for strong students with interest in mathematics, computer science, physics and other natural sciences. Physics majors usually take MATH124 simultaneously with PHYS120 and MATH125 simultaneously with PHYS121. Previous experience with calculus is recommended but not required. The honors calculus sequence covers much the same topics from calculus as the regular sequence (MATH120, 121, 122), but takes two semesters instead of three, and emphasizes both mathematical rigor and physical intuition. MATH124 and MATH125 fulfill the formal-analysis requirement. Prerequisite: appropriate score on the mathematics placement test. Mr. Morris, Ms. Sternberg/Offered every fall (124) and spring (125)

MATH125 HONORS CALCULUS II/LECTURE

See MATH124.

MATH126 ELEMENTARY NUMBER THEORY/LECTURE

Introduces number theory and trains students to understand mathematical reasoning and write proofs. Includes the unique factorization of integers as products of primes, the Euclidean algorithm, Diophantine equations, congruences, Fermat's theorem and Euler's theorem (and some applications: calendar problems, magic squares, cryptology). Prerequisite: MATH114, or one semester of calculus (MATH120 or 124), or permission. Mr. Joyce, Mr. Morris/Offered periodically

MATH128 MODERN GEOMETRY/LECTURE

Recalls Euclidean geometry and then proceeds to modern related topics: Hilbert's axioms; hyperbolic (Lobachevskian), elliptic and projective geometries, and philosophical implications of geometries without the Parallel Postulate; finite geometries; and automorphism groups (Klein's Erlanger Programme). One aim is to show the beauty of deduction in mathematics. Prerequisites: high-school geometry and either a semester of college mathematics or permission. Mr. Joyce, Mr. Rudolph/Offered periodically

MATH130 LINEAR ALGEBRA/LECTURE

A requirement for mathematics and physics majors; highly recommended for all computer-science majors. Topics include systems of linear equations and their solutions, matrices and matrix algebra, inverse matrices; determinants and permutations; real n-dimensional vector spaces, abstract vector spaces and their axioms, linear transformations; inner products (dot products), orthogonality, cross products, and their geometric applications; subspaces, linear independence, bases for vector spaces, dimension, matrix rank; eigenvectors, eigenvalues, matrix diagonalization. Some applications of linear algebra will be discussed, such as computer graphics, Kirchoff's laws, linear regression (least squares), Fourier series, or differential equations. Prerequisite: MATH121 or 125. Mr. Joyce, Mr. Rudolph, Ms. Sternberg/Offered every fall

MATH131 MULTIVARIATE CALCULUS/LECTURE

A continuation of calculus (MATH120, 121, 122 or MATH124, 125). Multivariate calculus uses linear algebra to extend the important concepts of single-variable calculus to higher-dimensional settings. Topics include scalar-valued and vector-valued functions, graphs, level sets, limits and continuity; partial derivatives, gradients, tangent planes, differentiability, total derivatives, directional derivatives; paths, velocity, acceleration, arclength, curvature, vector fields, divergence, curl; extrema, Hessians; multiple integrals, change of variables, Jacobians; line integrals, Green's theorem; surface integrals, Stokes' theorem, and Gauss's theorem. Prerequisites: MATH122 or MATH130. Mr. Chou, Mr. Joyce, Ms. Sternberg/Offered every spring

MATH172 Introduction to Modern Analysis/Lecture
Modern analysis provides a language and unifying framework for theories encountered throughout mathematics. In this course, students learn to understand, formulate and prove mathematical statements. Ideas first encountered in calculus—convergence, completeness and integration—are studied in depth. Other topics include metric spaces, normed spaces, compactness and measure theory (Lebesgue integration). Required for mathematics majors by the junior year, and earlier if possible. Prerequisite: MATH122 or MATH125. Mr. Chou, Mr. Morris, Ms. Sternberg/Offered every year

MATH201 Proseminar in Mathematics/Seminar
Senior undergraduates study and speak on topics in mathematics to become acquainted with diverse subjects, learn to research known topics and get practice in presenting mathematics to peers. Faculty present their research areas. Possible topics include: category theory, knot theory, automorphic forms, topos theory, low-dimensional topology, class field theory, group representation theory and dynamical systems. This is a capstone course in mathematics. Staff/Offered periodically

MATH212 Numerical Analysis/Lecture, Laboratory
Introduces concepts and techniques of scientific computing to students in mathematics, computer science and the sciences. Teaches how to set up reasonable computational algorithms and use the algorithms to work on actual projects. Topics include approximation theory, error analysis, numerical differentiation and integration, and solution of ordinary differential equations and linear systems. Prerequisites: MATH130 and MATH172. Mr. Chou, Ms. Sternberg/Offered every other year

MATH214 Modern Analysis/Lecture
Ideas introduced in MATH172 are developed and applied to scientific models. Topics include Hilbert spaces, Lp spaces, Fourier series, Weierstrass approximation theorems and linear operators. Prerequisites: MATH130 and MATH172. Mr. Chou, Ms. Sternberg/ Offered every other year

MATH216 Functions of a Complex Variable/Lecture
Designed for undergraduate science and mathematics majors. Includes Cauchy's theorem, power series, Laurent series, the residue theorem, harmonic functions and physical applications, such as problems in two-dimensional flow. An introduction to Riemann surfaces if time permits. Prerequisite: MATH131 and MATH172. Mr. Rudolph/ Offered periodically

MATH217 Probability and Statistics/Lecture
An introduction to probability theory and mathematical statistics that emphasizes the probabilistic foundations required to understand probability models and statistical methods. Topics covered will include the probability axioms, basic combinatorics, random variables and their probability distributions, mathematical expectation and common families of probability distributions. Prerequisite: MATH131. Mr. Joyce, Staff/Offered every year

MATH218 Topics in Statistics/Lecture
The emphasis of this course is to develop the fundamental statistical concepts of inference and hypothesis testing from a classical perspective using the tools of probability theory. Topics investigated include sampling and sample distributions, graphical data analysis, point and interval estimation, hypothesis testing and an introduction to Bayesian inference. Prerequisite: MATH217 or ECON260. Staff/Offered periodically

MATH219 Linear Models/Lecture
A course in linear regression analysis which explores statistical methods for modeling a linear functional relationship between a response variable and one or more predictor variables. First the underlying theory for simple regression models involving one response and one predictor variable is developed, and then the results are extended to the case of one response variable and multiple predictor variables (multiple regression). Underlying model assumptions are explored and the implications of their violation. Besides the development of the statistical theory, we will emphasize the practical application of the theory to real-world examples. The prerequisite for this course is MATH217.

MATH225 Modern Algebra I/Lecture
In the 19th century, Kummer introduced "ideal numbers" to salvage unique factorization of integers into primes (which breaks down in some rings of algebraic integers). This course discusses unique factorization and the modern theory of rings and their ideals, emphasizing Euclidean domains. Other algebraic structures (groups, fields) also are introduced. Required for all mathematics majors. Prerequisite: MATH130. Mr. Morris, Mr. Joyce/Offered every year

MATH226 Modern Algebra II/Lecture
In the early 1800s, Abel showed that a general equation of degree at least five cannot be solved by extracting roots. Today, group theory, developed by Galois to determine which equations are solvable, is used throughout mathematics and in much of physics and chemistry. This course focuses on groups and Galois theory. Other possible topics include canonical forms of matrices and modules. Prerequisite: MATH225. Mr. Joyce, Mr. Morris/Offered every other year

MATH228 Topology/Lecture
This course continues the study (begun in MATH131 and MATH172) of the topological properties of subsets of Euclidean space, developing algebraic tools like homology (the proper context for Stokes' theorem from MATH131) and fundamental groups, with an emphasis on finite simplicial complexes. Further topics may include knot theory and topological modeling in psychology. Prerequisites: MATH131 and MATH172, or permission. Mr. Rudolph/Offered every other year

MATH244 Differential Equations/Lecture
Most ordinary differential equations occurring in mathematical models of physical, chemical and biological phenomena cannot be solved analytically. Numerical integrations do not lead to a desired result without qualitative analysis of the behavior of the equation's solutions. This course studies the flows of scalar and planar ordinary differential equations. Stability and bifurcation are discussed. Prerequisite: MATH130 and MATH172. Ms. Sternberg/Offered every other year

Program Faculty

Judith DeCew, Ph.D. - *Chair*
Walter Wright, Ph.D.
Patrick Derr, Ph.D.
Scott Hendricks, Ph.D.
Gary Overvold, Ph.D.
Michael Pakaluk, Ph.D.

Part-Time Faculty

Barbara Carlson, C.Phil.

Affiliate Faculty

Bernard Kaplan, Ph.D.
Edward J. Ottensmeyer, Ph.D.

Visiting Faculty

C. Wesley DeMarco, Ph.D.

Program Overview

The Philosophy Department offers an undergraduate major in philosophy, a concentration in ethics and public policy, two minors in philosophy and a variety of elective courses, which nonmajors may take to broaden their education and fulfill Program of Liberal Studies requirements. The department also offers core or elective courses for concentrations in law and society, peace studies, ethics and public policy, and environmental science and policy.

Undergraduate Requirements

The requirements for a major in philosophy are designed to ensure exposure to the major systematic fields in philosophy, to ensure familiarity with advanced analytic and logical methods, acquaint the student with the history of the discipline, and provide close faculty-student contacts through advanced seminars and individual research projects. The major program accommodates general liberal-arts students and those pursuing double majors and honors work, as well as those considering graduate study in philosophy. Students, especially those considering graduate school, who wish a more intensive course of study toward the major should consult with department faculty and study the Philosophy Major Handbook in the department office.

Major requirements

1. Required courses in philosophy

- One course in formal logic (PHIL110)
- Two courses in the history of philosophy (PHIL141, 142, 143 or 145)
- One advanced course in the area of metaphysics (PHIL 234, 235 or 263)
- One advanced course in the area of epistemology (PHIL 240 or 241)
- One advanced course in the area of ethics and social philosophy (PHIL 220, 221 or 228)
- One advanced elective (200 or above), chosen to complement the student's second major or intended professional field
- A designated capstone seminar

2. Required courses outside philosophy

Either: (i) a completed double major; or (ii) a completed concentration (for example, environmental science and policy, ethics and public policy, women's studies, classics, ancient civilizations, Jewish studies, or communications); or (iii) a completed minor in any other program or department.

Honors Program

Honors, high honors or highest honors in philosophy may be conferred at graduation upon majors who, in addition to having compiled a suitable record in the major, successfully defend their senior thesis in an oral presentation to their thesis committee. To be considered for honors, a student must have at least a 3.0 overall GPA combined with a higher GPA in philosophy. Students who complete a thesis but do not have an adequate GPA, or who otherwise don't meet honors requirements, will simply receive a grade (without an honors designation) for their senior thesis.

Capstone Seminars

The philosophy major culminates in the Capstone Seminar. Each semester the department will designate one of its seminar offerings as the capstone. These will provide an in depth engagement with a central topic, figure or movement in philosophy, and will involve serious opportunities for independent study by participating students. Capstone courses will also be open to noncapstone students. At the end of the second semester of the prior year, all majors will be informed which two seminars, one designated for each term, will be capstone seminars for the coming school year. Majors must take the capstone during their senior year; students taking it for capstone credit should register for the 'capstone' section of the seminar.

Department Prizes and Awards, and Student and Honor Societies

Each year, the department inducts its best junior and senior philosophy majors into Phi Sigma Tau, the national philosophy honor society. At the spring honors convocation, the department awards one or more prizes to exemplary graduating seniors. At the Fall convocation, the department confers a prize for the best work in logic by a first- or second-year student, and the David Saltman Prize for excellence in philosophy.

The Philosophy Club, a student organization, sponsors lectures, colloquia and informal educational and social activities for all interested Clark students.

Philosophy Minor

Students pursuing a minor in philosophy at Clark can choose one of two tracks. Each track requires six courses in philosophy and is designed to develop students' intellectual skills and to familiarize them with the fundamental methods of philosophical inquiry. Each track begins with a foundation in logic and practical ethics.

The great issues-minor track emphasizes a grounding in the history of philosophy. This track engages the student in the fundamental philosophical questions with which human beings have been perennially concerned: for example, Does God exist? How ought I to live? What is knowledge? Do human beings have free will? Can political authority be legitimated? Is there life after death?

The enriched-minor track emphasizes advanced work in courses related to students' majors. This track engages students in the fundamental philosophical questions, which their own major fields raise but do not answer: for example, What is a mind? What is a person? What is the nature of a profession? What is science? What is justice?

Requirements for the Great Issues-Minor Track

- One course in logic (PHIL103 or 110)
- One course in practical ethics (PHIL105, 130, 131, 132, 133 or 139)
- Three courses in the history of philosophy (PHIL141, 142, 143, 145, 148, 154 or 215)
- One advanced elective course (PHIL150+)

Requirement for the Optional Enriched-Minor Track

- One course in logic (PHIL103 or 110)
- One course in practical ethics (PHIL105, 130, 131, 132, 133 or 139)
- One course in the history of philosophy (PHIL141, 142, 143, 145, 148, 154 or 215)
- One elective course, chosen at any level
- Two advanced courses (PHIL150+) chosen to complement the student's major or preprofessional program.

Courses

PHIL025 Eros and Thanatos Conceptions/First-Year Seminar
Eros and Thanatos are essential human preoccupations across a wide range of cultures. We encounter eros, or love, in all experiences of intensity, creation and connection. Thanatos, or death, occurs as loss and decay, but also as the natural cycle of endings and beginnings. PHIL025 is connected to ARTS025. Meeting sometimes separately and sometimes together, work with a common set of issues and readings. They will examine conceptions of love and death from around the world, tracing the implications of "eros" and "thanatos" for our relations with the natural world. These courses include experiential exercises, writing and making. Fulfills the Global Compatative Perspective.

PHIL050 Relativism and Absolutism Across the Disciplines/ First-Year Seminar
We explore rival claims of relativists and absolutists in ethics, religion, math and the sciences, and consider some varieties of pluralism as option to these claims. Ours is a case-study approach. We study and evaluate the 'Asian values argument' against the universality of human rights, a feminist criticism of empirical science, and consider the exclusivism of contemporary religious fundamentalism. We begin with experiments in color perception and some simplified examples of alternate mathematics, and then study claims of cognitive differences across cultures. These case studies prepare us for an engagement with texts from Wittgenstein, Quine, Davidson, Nietzsche, Hegel, Habermas and Tillich that help us to think about a family of issues concerning meaning, interpretation, and truth that span disciplinary divides. Fulfills the Verbal Expression requirement. C. Wesley DeMarco/Offered periodically

PHIL102 Introduction to Philosophy/Lecture, Discussion
Introductory study of typical problems drawn from philosophy's main branches. Topics include God's existence, the nature of morality, skepticism, freedom vs. determinism, immortality and political theory. Readings are taken from both classic and contemporary sources. Mr. Overvold, Mr. Pakaluk, Mr. Hendricks/Offered every year

PHIL103 Analytic Reasoning/Lecture, Discussion
This is a hands-on course, designed to help students improve a very important set of life skills, collectively referred to as "critical thinking." While this is considered an informal logic course (because it analyzes reasoning within the natural language context), it goes beyond the principles of basic logic, encouraging students to ask thoughtful questions in their ongoing process of establishing a set of beliefs that can serve as a reliable roadmap of experience. Ms. Carlson/Offered every year

PHIL104 The AIDS Pandemic/First-Year Seminar
The Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) present American society with a public-health challenge of unprecedented dimensions – a challenge, which will test not only our scientific and medical establishments, but our commitment to social justice, professional fidelity and interpersonal solidarity. This seminar will draw on the rich philosophical, biological, epidemiological, legal, medical and sociological literatures in order to examine a number of the moral and public-policy issues that have been raised by the HIV epidemic. Particular attention is given to the issues raised by the international nature of the pandemic. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Mr. Derr/Offered every other year

PHIL105 Personal Values/Lecture, Discussion
A philosophical study of some fundamental human value concerns. Students learn some important moral theories and methods used to reason philosophically about moral questions. Ms. Carlson, Ms. DeCew, Mr. Wright/Offered every semester

PHIL106 Science, Religion and Reality/First-Year Seminar
This seminar will address some basic issues in the philosophy of science and the philosophy of religion: What is science? What is reality? How do science and religion differ with regard to the relative roles played by faith and evidence in establishing knowledge claims about reality? Does science provide better explanations than theology or literature? How do religious arguments for the existence of God differ from scientific arguments for the existence of dark matter? Special attention will be given to developing students' abilities to read complex texts, write logically, think analytically and argue cogently. Fulfills the Verbal Expression requirement. You must be placed at the Verbal Expression level to be admitted into this seminar. Mr. Derr/Offered every other year

PHIL107 Logic and Legal Analysis/Lecture, Discussion
This course introduces students to the rigors of modern symbolic logic as a tool for understanding and evaluating legal arguments of various types and for generally improving analytical skills. Attention will be directed to the unique features of legal reasoning. Sample LSAT problems, along with traditional logic problem-solving exercises and occasional creative oral class presentations, will be assigned. Ms. Carlson/ Offered every year

PHIL108 Privacy Protection in Law and Ethics/First-Year Seminar
In this class, we will first survey the history of privacy protection as it has evolved in American tort law and constitutional law. We will then analyze alternative philosophical characterizations of privacy and its scope, focusing on information, autonomy, property and intimacy. We will assess varied reasons for valuing privacy and then consider constrasting versions of the feminist critique of privacy as a tool for shield-

ing abuse. Throughout the course we will study landmark legal cases invoking privacy from the early 1900's to the present, with an eye toward understanding the scope and limits of privacy protection. We will consider numerous applications of privacy to moral and legal issues including the legislation of morals, drug testing, information technologies, and the balance between privacy and public safety.

PHIL109 DAVID HUME AND HIS CRITICS: SKEPTICISM VS. BELIEF
Does God exist? Do we have freedom of the will? Can we acquire real knowledge about the world? These are some of the perennial questions of philosophy. David Hume, an 18th-century Scottish philosopher, is famous for apparently answering all of these questions in the negative, and his answers have deeply affected the modern world. In this seminar, we grapple with these and other fundamental issues, by looking at Hume's arguments and those of his most powerful critic, Thomas Reid. This seminar is an excellent introduction to philosophy. Fulfills the Verbal Expression requirement. You must have been placed at the Verbal Expression level to select this seminar. Mr. Pakaluk/First-Year Seminar

PHIL110 INTRODUCTION TO LOGIC/LECTURE, DISCUSSION
An introduction to modern symbolic logic with attention to its application in analyzing ordinary language arguments. Mr. Hendricks, Mr. Pakaluk/Offered every year

PHIL111 PERSONS, ROBOTS AND APOCALPYSE/FIRST-YEAR SEMINAR
Examination of the place of human beings in the present world. We discuss various modern visions of human beings – political, scientific and religious. Readings include accounts of the Nazi holocaust, current literature in psychology, and both fiction and film exploring the idea that people are essentially machines. Mr. Hendricks/Offered every year

PHIL112 THE PHILOSOPHY OF THOMAS AQUINAS/FIRST-YEAR SEMINAR
This seminar studies the worldview of Thomas Aquinas. Aquinas' system was the great medieval harmony of Greek philosophy, Roman judicial thought, the best science of the day, and Western and Eastern theology. It is still regarded as an admirable response to the problem of faith and reason. Moreover, Aquinas' "disputational method" remains a model of dispassionate speculative inquiry. We look at Aquinas' Five Ways (arguments for the existence of God); his discussion of the attributes of God; his philosophical anthropology (that is, his account of human nature); and his views on ethics and natural law. Writing assignments will involve stating and defending a thesis using clear, orderly and logical reasoning. Students will be asked to model their assignments on Aquinas' writing. This seminar is an excellent introduction to philosophy and intellectual history. Fulfills the Verbal Expression requirement. You must have been placed at the Verbal Expression level to choose this seminar.

PHIL125 ATHEISM AND BELIEF IN GOD
The goal of this course is to introduce students to two basic world views—the atheistic world view and the theistic world view—and to help them find reasonable grounds for deciding upon the one or the other. In looking at these, the course also introduces students to some of the most important movements in thought shaping the last century. Mr. Pakaluk/Offered periodically

PHIL130 MEDICAL ETHICS/LECTURE, DISCUSSION
Investigates contemporary issues in medical ethics: informed consent, definitions of death, treatment termination and euthanasia, abortion, confidentiality and truth telling, genetic screening and counseling, research on human subjects, resource allocation, reproductive technologies, conflicts of interest and national health policy. Not open to first-year students. Mr. Derr/Offered every year

PHIL131 ENVIRONMENTAL ETHICS/LECTURE, DISCUSSION
What principles should guide human interaction with the environment? This course considers a range of moral perspectives, including anthropocentrism, animal-rights theory, biocentrism, social ecology, ecocentrism, deep ecology, ecofeminism and the land ethic. It also considers a range of environmental issues, such as global warming, species preservation, population policy, pollution, nuclear power, animal experimentation and sustainable development. Mr. Derr/Offered every year

PHIL132 SOCIAL AND POLITICAL ETHICS/LECTURE, DISCUSSION
Topics in social and political theory, such as equality, liberty and justifications for political authority, as well as issues such as: What is affirmative action and can it be morally justified? Should governments censor pornography? Is capital punishment acceptable? Can war be justified? Should morality be legislated? Ms. DeCew, Offered every year

PHIL133 BUSINESS ETHICS/LECTURE, DISCUSSION
Investigates moral problems in and about the world of business: Do corporations have moral responsibilities or is their only social responsibility to increase profits? Is capitalism morally justifiable or is some other politico-economic system morally preferable? Discusses ethical issues in advertising, affirmative action and business's responsibilities toward the environment. Staff/Offered periodically

PHIL134 LIBERALISM AND ITS CRITICS/LECTURE, DISCUSSION
After a basic introduction to the liberal political theory of John Rawls, the course examines his recent critics to investigate whether and how conservative political thought offers a viable alternative to liberalism. Mr. Pakaluk/Offered periodically

PHIL135 EXISTENTIALISM IN PHILOSOPHY, LITERATURE AND THE HUMAN SCIENCES/LECTURE, DISCUSSION
Explores central existential themes—such as the meaning of life, freedom and responsibility; the role of the irrational in human thought, action and expression; and the death of God in their historical, cultural and thematic context. Existentialism is treated both as a postwar cultural event and as a view of life's meaning and possibilities. Mr. Overvold/Offered every year

PHIL136 THE LIFE AND TIMES OF DAVID HUME/LECTURE, DISCUSSION
On examination of Hume's "Enquiry Concerning Human Understanding" in relation to the Scottish Enlightenment and some criticisms of Thomas Reid. Mr. Pakaluk/Offered periodically

PHIL139 MORAL PROBLEMS IN THE PROFESSIONS/LECTURE, DISCUSSION
This course examines moral issues and dilemmas typically found in the professions, that is, in law, medicine, advertising, therapy, business, education, etc. Among the issues considered are privacy and confidentiality, truthfulness and deception, individual responsibility, social justice, professionalism, and generally, the dilemmas created by conflicts between professional or role morality and personal or ordinary morality. Mr. Overvold/Offered periodically

PHIL141 HISTORY OF ANCIENT GREEK PHILOSOPHY/LECTURE, DISCUSSION
Examines the origins of Western thought in early Greek philosophy. Readings include the fragments of the pre-Socratic philosophers: the Apology, Phaedo, Gorgias and Republic of Plato; and selections from Aristotle. Mr. Pakaluk, Mr. Hendricks/Offered every year

PHIL142 History of Medieval Philosophy/Lecture, Discussion
Surveys Christian, Jewish and Islamic medieval philosophy with special attention to some of the philosophical texts that were pivotal to the later development of Western philosophy and culture. These include Augustine's Confessions, Boethius' Consolation of Philosophy and Aquinas' Summa Contra Gentiles. Mr. Pakaluk/Offered periodically

PHIL143 History of Modern European Philosophy/Lecture, Discussion
The principal movements of European philosophy in the 17th century are examined from their common origin in Descartes, through their later articulations by Spinoza, Locke, Berkeley, Leibniz and Hume. Emphasis is on the interaction of philosophy and culture and on the powerful influence exerted by the modern European thinkers upon contemporary thought. Mr. Wright/Offered every year

PHIL145 History of Contemporary Philosophy/Lecture, Discussion
Surveys the major trends in recent Anglo-American and Continental philosophy: pragmatism, logical positivism, ordinary language philosophy, hermeneutics and phenomenology. Each alternative is considered as a coherent perspective on experience, with special attention given to its style and methodology. Prerequisite: PHIL143 or permission of the instructor. Mr. Overvold/Offered every year

PHIL148 History of American Philosophy/Lecture, Discussion
Concentrates on the founders of the first indigenous American philosophical movement, pragmatism—Peirce, James and Dewey—and explores their influence on later pragmatists—Lewis, Quine and Rorty. Prerequisite: one course in philosophy. Staff/Offered periodically

PHIL150 Philosophy of Religion/Lecture, Discussion
Studies religion as a form of world view and a perennial dimension of human experience. Prerequisite: one course in philosophy. Mr. Wright/Offered every year

PHIL160 Intermediate Logic/Lecture, Discussion
An examination of one of the following: extensions of first-order logic (modal logic, deontic logic, tense logic); metalogic; axiomatics; philosophical problems that arise in connection with formal logic. Mr. Pakaluk/Offered periodically

PHIL166 Philosophy of Love
Varieties of love, their transformations and transformative effects. Erotic love (what enhances it, what perverts it), familial love and friendship. Love as feeling, love as attention, love as will, love as act, love as being. Love as illusion, as sublimation, as biochemical process; love as the spice of life and as the essence of the psyche. Love as union, as bonding, as partnering and as mutual development of differences. Love as a gift, and love as an art. Love in relation to desire, knowledge, power and ecstasy. Love of truth, love of beauty, love of justice. Love of self, love of community, love of nature, love of God. Selections from Plato, Ovid, Dante, Shakespeare, Marx, Freud, Goldman, Sartre, Tillich, Nagel, Wilson, Berry, Bernard, Rumi, and stories of the Baal Shem Tov. Fulfills the Values Perspective.

PHIL169 Aesthetics/Lecture, Discussion
Why did Plato condemn poets and their work? Can art be neatly defined? Is art "imitation," "emotion," "relations of forms," or is it indefinable? Are there standards of beauty? Among the theories we consider are those of Aristotle, Tolstoy, Collingwood, Danto, Dickie and Kant. Prerequisite: one course in philosophy. Mr. Hendricks/Offered periodically

PHIL171 Philosophy of Education/Lecture, Discussion
An examination of our educational institutions, the value of education and various theories of education. Focus on such questions as: What kinds of educational institutions are possible? Which ones are best? What does it mean to be educated? What is the value of being educated? We will approach these questions through the works of Marx, Plato, Rousseau and others. In addition, we consider the application of research in psychology and social psychology. Mr. Hendricks/Offered every year

PHIL201 Surseminar: Research and Writing in Philosophy/Seminar
Prerequisite: permission. Staff/Variable credit

PHIL202 Surseminar: Philosophical Journals/Seminar
Prerequisite: permission. Staff/Variable credit

PHIL203 Surseminar: Teaching Philosophy/Seminar
Registration is limited to students working as discussion group leaders in PHIL102, 105, 110, 130, 131 or 132. Mr. Derr, Ms. DeCew, Mr. Hendricks, Mr. Pakaluk, Mr. Wright/Offered every semester

PHIL210 Modernism in Philosophy, Literature and the Arts/Lecture, Discussion
Between 1890 and 1930, the forms of inquiry and artistic expression in Western culture went through radical, foundational transformation. Using representative texts from the humanities and the arts, this course examines the Modernist transformation in its historical, cultural and thematic context, using a multidisciplinary perspective to integrate topics in related areas of inquiry and expression. Prerequisite: two courses in philosophy plus courses in related areas. Mr. Overvold/Offered periodically

PHIL211 Cognitive Science/Lecture, Discussion
An advanced philosophical discussion of the current research in cognitive psychology, artificial intelligence, neuroscience and philosophy. We investigate the central features and underlying philosophical assumptions of the science of the mind, including various forms of computationalism, as well as different types of experimental procedures. Mr. Hendricks/Offered periodically

PHIL212 Philosophy and the Human Sciences/Lecture, Discussion
Using texts from both the humanities and the social sciences, the course examines central philosophical themes in the human sciences—rationality; action, choice and character; human nature; the other; self and society; explanation and human action—in their historical, cultural and thematic context, integrating topics in related areas of inquiry and expression. Prerequisite: two courses in philosophy plus courses in related areas. Mr. Overvold/Offered periodically

PHIL213 The Ideal of the Educated Person/Seminar
This course investigates the importance of social, moral and scientific knowledge on our culture, how educational institutions incorporate such knowledge, and the impact of education on the individual. Students will be asked to reflect upon and discuss the competing ideals of knowledge and humanity that influence the formation of educational goals, determine the purpose of public policy and shape our reflections on self-understanding. Mr. Overvold, Mr. Hendricks/Offered periodically

PHIL214 Postmodernism and Recent Continental Philosophy/Lecture, Discussion
Introduces five contemporary European philosophical movements: hermeneutics, deconstructionism, critical theory, structuralism and poststructuralism. Prerequisite: two courses in philosophy or permission of instructor. Mr. Overvold/Offered periodically

PHIL215 KANT AND THE 19TH CENTURY/LECTURE, DISCUSSION
Examines the work of Kant and selected later philosophers (Fichte, Hegel, Schopenhauer, Nietzsche, Marx, Engels and Comte) with emphasis on their influence on contemporary thought. Prerequisite: two courses in philosophy, including PHIL143. Mr. Wright/Offered every other year

PHIL219 FEMINIST THEORY/LECTURE, DISCUSSION
Investigates selected topics in recent feminist philosophical literature. Topics and authors vary each year. Attention is given to the many different perspectives included in contemporary feminist theory. Prerequisite: two courses in philosophy or permission of the instructor. Staff/Offered periodically

PHIL220 THEORIES OF ETHICS/LECTURE, DISCUSSION
Examines the principal ethical theories from the history of Western philosophy, including such philosophers as Plato, Aristotle, Epicurus, Aquinas, Hobbes, Hume, Kant, Mill, Ross and Rawls. Topics include: What is "the Good"? Are there fundamental standards of right conduct? Are moral judgments objective? Why should we be moral? Prerequisite: two courses in philosophy. Ms. DeCew/Offered every year

PHIL221 SOCIAL AND POLITICAL PHILOSOPHY/LECTURE, DISCUSSION
Surveys the leading philosophical accounts of social and political institutions. Property, civil and natural rights, freedom and obligations and the legitimation of political authority are treated in detail. Readings include both classical and contemporary sources. Prerequisite: two courses in philosophy. Ms. DeCew/Offered every other year

PHIL228 CONTEMPORARY MORAL THEORY/LECTURE, DISCUSSION
Surveys recent work in moral theory (including both metaethical and normative issues) by leading Anglo-American philosophers. Prerequisite: two courses in philosophy. Ms. DeCew, Mr. Pakaluk/ Offered periodically

PHIL232 CASE STUDIES IN ENVIRONMENTAL ETHICS/SEMINAR
An intensive examination of a small set of issues or cases chosen by course members. Recent topics include old growth forest, ecotourism, animal experimentation, invasive species and water-use restrictions. Prerequisite: Environmental Ethics. Mr. Derr/Offered every other year

PHIL234 METAPHYSICS/LECTURE, DISCUSSION
An advanced study of fundamental problems in metaphysics, including one or more of the following: universals, substance, the mind/body relation, category theory, identity and individuation, free will, and the nature of space and time. Prerequisite: two courses in philosophy. Mr. Pakaluk, Mr. Wright/Offered every other year

PHIL235 SELF AND NATURE/LECTURE, DISCUSSION
Considers various conceptions of the self in relation to nature developed by classical and contemporary thinkers, with emphasis on the interconnectedness of these terms. Prerequisite: two courses in philosophy. Mr. Wright/Offered every other year

PHIL240 EPISTEMOLOGY/LECTURE, DISCUSSION
Studies the nature, concept and sources of knowledge, with special attention to the interrelationships among belief, knowledge, evidence, proof, truth, and the problem of relativism, skepticism and foundationalism. Prerequisite: two courses in philosophy. Mr. Overvold, Mr. Hendricks/Offered every year

PHIL241 PHILOSOPHY OF SCIENCE/LECTURE, DISCUSSION
Examines such questions as: What is a scientific explanation? Can induction be justified? What could justify the claim that one theory is better than another? Are there such things as objective facts? Do scientific theories disclose the ultimate constituents of the universe? What is the difference between science and pseudoscience? Prerequisite: four courses in natural sciences or two courses in philosophy. Mr. Derr/Offered every other year

PHIL242 PHILOSOPHY OF LANGUAGE/LECTURE, DISCUSSION
A philosophical examination of language. Explores general questions such as: What is the relationship between language and the world? What is the relationship between language and thought? Focuses on the nature of reference, meaning, names, conceptual schemes and analyticity. We will read works by Frege, Russell, Grice, Quine, Kripke and Kaplan. Mr. Hendricks/Offered periodically

PHIL243 PHILOSOPHY OF PSYCHOLOGY/LECTURE, DISCUSSION
Focuses on the assumption that the mind is a machine that can be studied scientifically. We examine questions concerning the relationship between the mind and the brain, the ideas that the mind is a computer and that an artificial machine could think, and various proposals for how the mind is structured, including connectionism. Mr. Hendricks/Offered periodically

PHIL250 PLATO/SEMINAR
An advanced study of the philosophical thought of Plato. The seminar involves careful reading and discussion of one of the major dialogues, such as the Parmenides, Sophist or Theaetetus. Prerequisite: PHIL141. Mr. Pakaluk/Offered every other year

PHIL251 ARISTOTLE/SEMINAR
An advanced study of the philosophical thought of Aristotle. The seminar involves careful reading and discussion of one of the major works, such as the De Anima, Physics, Metaphysics and Nicomachean Ethics. Prerequisite: PHIL141. Mr. Pakaluk/Offered every other year

PHIL256 KANT/SEMINAR
A study of Kant's "Critique of Pure Reason," regarded by many as the most important philosophical text of the last several hundred years. Prerequisite: two courses in philosophy, including PHIL143. Mr. Wright/Offered periodically

PHIL257 HEGEL/SEMINAR
Hegel's "The Phenomenology Mind" and selections from his other works are covered. Prerequisite: two courses in philosophy, including PHIL143. Mr. Wright/Offered periodically

PHIL258 THE ORIGINS OF ANALYTIC PHILOSOPHY/SEMINAR
Examines the development of analytic philosophy through an intensive study of its three founding figures: Gottlob Frege, Bertrand Russell and Ludwig Wittgenstein. Readings include Frege's "Foundations of Arithmetic," Russell's "Mysticism and Logic" and Wittgenstein's "Tractatus Logico-Philosophicus." Prerequisite: two courses in philosophy, including PHIL110 or PHIL160. Mr. Pakaluk/Offered periodically

PHIL260 KIERKEGAARD AND NIETZSCHE/SEMINAR
Studies Kierkegaard and Nietzsche as seminal figures in 19th-century intellectual life and as sources of later 20th- and 21st-century philosophical developments. Particular attention is given to their views of human existence and of truth. Prerequisite: two courses in philosophy. Mr. Overvold/Offered periodically

PHIL263 PHILOSOPHY OF MIND/SEMINAR
A critical examination of the nature and concept of mind. We consider various issues from among the following: What is the relationship between the mind and the brain? What is the nature of consciousness? How do mental states represent the world? What is the structure of the Mind? Is the mind a machine? Mr. Hendricks/Offered periodically

PHIL265 Idealism/Seminar
Detailed and advanced study of the major idealistic philosophers. Course topics and texts will vary. Mr. Wright/Offered every other year

PHIL266 Critical Rationalism/Seminar
Focuses on the theories of knowledge, rationality and science advanced by such contemporary thinkers as Kuhn, Popper, Feyerabend, Laudan, Lakatos and Zahar. Prerequisite: two courses in philosophy, including PHIL241, or permission. Mr. Derr/Offered periodically

PHIL270 Philosophy of Law/Seminar
Examines fundamental questions in philosophy of law, such as: What is the source and purpose of law? What is the nature of judicial reasoning, and is it subjective or governed by some set of principles? How do alternative theories of law explain rights, duties, liability, responsibility and so forth? What is the relationship between liberty, privacy and justice? Readings include selections from legal theory and a variety of contemporary court decisions. Prerequisite: two courses in philosophy. Ms. DeCew/Offered every year

PHIL272 Advanced Issues in Medical Ethics/Seminar
See Philosophy 272.

PHIL273 Aids Pandemic
The Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) present American society with a public health challenge of unprecedented dimensions – a challenge, which will test not only our scientific and medical establishments, but our commitment to social justice, professional fidelity, and interpersonal solidarity. This course will draw on the rich philosophical, biological, epidemological, legal, medical and sociological literatures in order to examine a number of the moral and public policy issues that have been raised by the HIV epidemic. Particular attention is given to the issues raised by the international nature of the pandemic. Fulfills the Verbal Expression requirement. Mr. Derr/Offered every other year

PHIL275 Phenomenology and Hermeneutics/Seminar
Traces the development of two major 20th-century movements in continental philosophy. Edmund Husserl and Maurice Merleau-Ponty are focused on in Phenomenology: Hans Georg Gadamer in Hermeneutics. In both, collateral reading will present the historical context and development of each movement. Prerequisite: at least three courses in philosophy. Mr. Overvold/Offered periodically

PHIL276 Heidegger and Early 20th-Century Philosophy/Seminar
Concentrates on developments in 19th- and 20th-century Continental philosophy, which influenced the main text of this seminar, Heidegger's "Being and Time." Attention also will be given to the broader cultural context and to parallel changes in American and British philosophy during the early 20th-century. Prerequisite: at least three courses in philosophy. Mr. Overvold/Offered periodically

PHIL287 Philosophy of the Social Sciences/Seminar
A critical and intensive survey of the four alternative accounts of explanation, social reality and social science put forward by the neopositivist empiricists, the phenomenologists, the neo-Wittgensteinians and the Continental hermeneuticists and critical theorists. Special attention is given to theories of explanation in history and in psychology. Prerequisite: at least four courses in philosophy or graduate status in a social science. Mr. Overvold, Mr. Kaplan, Mr. Pakaluk/Offered periodically

PHIL295 Senior Thesis/Individual Projects
The prerequisites, which should be completed by the end of the student's junior year, are: (1) at least six courses in philosophy; and (2) submission and approval of a thesis proposal. The thesis proposal must describe the nature and scope of the proposed project, provide a bibliography of the principal sources the student expects to use, include a schedule for submission of first and final drafts to the adviser and the committee and be signed by the student's thesis adviser. Upon completion of the thesis, the department faculty schedules an oral defense for the student. For regulations for honors, see earlier entry. Offered for one or two credits over one or two semesters. Staff

PHIL299 Sec. 1 Directed Readings/Individual Projects

PHIL299 Sec. 2 Directed Research/Individual Projects
See description and prerequisites under Major Requirements.

PHIL299 Sec. 5 Research Apprenticeship/Individual Projects
A research apprentice participates in the current professional research of her or his faculty sponsor. Students accepted as apprentices need initiative, perseverance and superior research and writing skills. Prerequisite: at least four courses in philosophy, permission of the instructor and approval of the department. Staff/Offered every semester

PHIL299 Sec. 7 Advanced Topics in Philosophy/Individual Projects
Individual tutorials and supervised research on philosophical topics selected by the student and faculty sponsor. Prerequisite: at least four courses in philosophy and permission of instructor. Staff/Offered every semester

PHYSICS

Program Faculty

Charles Agosta, Ph.D. - *Chair*
S. Leslie Blatt, Ph.D.
Harvey Gould, Ph.D.
Arshad Kudrolli, Ph.D.
Christopher P. Landee, Ph.D.
Ranjan Mukhopadhyay, Ph.D.

Adjunct Faculty

Daeg Brenner, Ph.D.
Robert Goble, Ph.D.
Shuanghong Huo, Ph.D.

Affiliate Faculty

George Phillies, Ph.D.

Visiting Faculty

Moataz Emam, Ph.D.

Emeriti Faculty

Roy S. Andersen, Ph.D.
John Davies, Ph.D.
Christoph Hohenemser, Ph.D.
Roger P. Kohin, Ph.D.

Program Overview

Physics is the most fundamental of the sciences and is an important part of a liberal-arts education. Introductory courses are designed for students in all majors and provide a background in physical principles, the observation of natural processes, the logic and nature of science, and the diverse applications of physics. The introductory courses are:

1. Scientific Perspective Courses. PHYS020, 030, 140, ASTR001 and ASTR002 have no prerequisites and fulfill the Scientific Perspective requirement of the Program of Liberal Studies. PHYS110 and 120 can be taken in satisfaction of either the Scientific Perspective or Formal Analysis requirement, but not both. PHYS111, 121, 127, 130 and 131, which also fulfill the Scientific Perspective, are primarily for science majors.
2. Introductory Sequences. Prospective science majors are urged to begin their study of physics during their first or second years. The department offers two sequences of introductory courses. PHYS110/111 is a two-semester, noncalculus-based survey of physics appropriate for the majority of science majors, including environmental science and policy majors and premedical/predental students. PHYS120/121/130 is a three-semester sequence, recommended for physics, chemistry and mathematics majors, which covers mechanics, electricity and magnetism, waves, and optics in more depth than the 110/111 sequence. Because PHYS121 discusses the subject matter more deeply, it is less comprehensive than PHYS111, and should be followed by PHYS130.
3. Laboratory Courses. PHYS110, 111, 120, 121, 127, 130, 131 and 219 offer laboratory experience. PHYS110 and 111 fulfill the physics laboratory requirement for premedical/predental students.

Undergraduate Requirements

A major in physics can be structured to meet the interests of individual students, including graduate study in physics, related sciences, engineering, and careers in environmental studies, management, government, law, medicine and teaching. During their first year, prospective physics majors are urged to enroll in PHYS120 and 121 and to consult the undergraduate physics adviser about their program of study. Physics major requirements consist of 14 common core courses and four additional approved courses in physics or related areas. The requirements are flexible and, through consultation with the undergraduate physics adviser, may be modified to satisfy the particular needs and interests of each student. Examples of individual programs include:

General Physics – for students who wish to major in physics as part of liberal-arts education, including preparation for careers in teaching or business.

Preprofessional Physics – courses in physics, chemistry and mathematics to prepare students for graduate study in physics or research in industry.

Biological Physics – includes chemistry and biology courses that can be used to prepare for medical or dental schools or for careers in the biomedical professions.

Computational Physics – advanced courses in physics, computer science and mathematics designed to prepare students for graduate study in the rapidly growing area of computational science.

Students interested in using physics as the basis for an engineering career should inquire about the 3/2 Engineering Program offering students a five-year option that combines a B.A. from Clark and a B.S. in engineering from Columbia University, Washington University (St. Louis) or Worcester Polytechnic Institute.

Courses in the core curriculum include:

1. Introductory Physics (2):
   PHYS120 and PHYS121 (or PHYS110/111)
2. Intermediate-level Physics (2):
   PHYS130 and 131
3. Calculus (4):
   MATH124, 125, 130 and 131
4. Laboratory-based courses (1):
   PHYS127 or 219
5. Upper-level courses (4):
   PHYS150, 160, 161 and 171
6. Senior project (1):
   PHYS299

Total in core curriculum: 14

Additional approved electives: 4

Total in major program: 18

Students with strong backgrounds in physics and mathematics may replace lower-level required courses with appropriate advanced courses with adviser approval. Advanced-placement credits may count toward major requirements. Advanced undergraduates may take graduate-level courses. Majors must meet with the undergraduate physics adviser prior to registration every semester to plan their course of study and to ensure that all requirements for the major are being satisfied. It is possible to complete all requirements for the major within three years, so that it is not essential to begin the study of physics in the first year.

Information about career opportunities and further information about courses and major requirements can be obtained from the undergraduate physics adviser and other physics faculty members.

The Capstone Experience

An independent research project is the appropriate capstone experience for most physics majors. Students are encouraged to "do physics" at the earliest opportunity. Majors must take a capstone course satisfied by one semester of PHYS299 Directed Study in Physics, or an approved course of comparable scope. Near the end of the junior year (or earlier) a physics major should choose a topic for his or her senior project with department faculty. Work is conducted under the guidance of a faculty member, often with the assistance of graduate students. These projects often lead to publication in refereed physics journals. Majors with a special interest in research may continue their research by enrolling in additional semesters of PHYS299.

Honors Program

Students can apply for departmental honors in recognition of meritorious academic achievement and creativity in research. An honors candidate must maintain a minimum overall B– average. All eligible majors are encouraged to participate. Written applications should be submitted to the undergraduate adviser by the end of the junior year. Candidates will conduct a research project under faculty member guidance during the junior and/or senior years. A thesis describing the work must be submitted no later than April 1 of the senior year and be defended orally in a special departmental convocation about two weeks later. Recommendation for honors in physics is made on the basis of the quality of the thesis and student performance in the defense. Students may gain credit for thesis research by registering for PHYS299.

Physics Minor

The requirements for a minor in physics include six courses consisting of PHYS120/PHYS121 (or 110/111), PHYS130, PHYS131 and two additional electives approved by the undergraduate physics adviser. Students receiving credit for a scientific perspective course in physics prior to enrolling in PHYS120 may use it to replace one elective course. Requirements are flexible and the undergraduate physics adviser can replace any of the required core courses for students who are prepared for more advanced training.

Accelerated Degree Program

Physics offers an accelerated B.A./Master's degree program to eligible students. For more information, visit www.clarku.edu/accelerate

Graduate Program

The department offers the Master of Arts and Doctor of Philosophy degrees in physics. Research is concentrated in experimental and theoretical studies of condensed matter, including organic superconductivity, molecular magnetic materials, granular matter, complex materials and nonlinear physics, biological physics, supercooled liquids and nucleation, and computer simulations. Other research areas include theoretical plasma physics, polymer science, nuclear physics and biomolecules.

Further information on the research interests of the faculty and research opportunities for graduate students can be found at the department's Web site, www.clarku.edu/departments/physics

Application forms for admission and financial aid may be requested from the chair of the department. During the academic year, financial support is available in the form of tuition remissions, teaching assistantships and research assistantships. The department considers the financial support of its graduate students an important responsibility.

Requirements

The academic requirements are flexible with emphasis on early student participation in research and informal student evaluation. A distinctive part of each student's course work is a research apprenticeship, PHYS303, which introduces students to different research groups beginning in the first year of graduate studies.

M.A. degree students must satisfy the general University residence and course requirements, pass four of the core graduate courses (PHYS301, 302, 305, 306, 309 and 310) and one semester of PHYS303 with a grade of B– or better, and pass two oral examinations in the subject matter of the core graduate courses. In contrast to M.A. physics programs at many other universities, M.A. candidates also must complete a thesis based on original research.

Ph.D. degree students must fulfill residence and course requirements, pass the core graduate courses (PHYS301, 302, 305, 306, 309 and 310) with a grade of B or higher, and complete three semesters of PHYS303. The department does not rely on a formal written qualifying examination to evaluate student readiness for the Ph.D. Instead, students must pass four oral examinations that stress qualitative, as well as quantitative aspects of the subject matter of the core graduate courses. Students are required to pass an additional graduate course (approved by the graduate student adviser) in a subject that is outside the area of their dissertation concentration. The course may be in physics, the other sciences, mathematics, computer science or in another appropriate field. Ph.D. candidates also complete a dissertation based on original research. Students entering with advanced standing and transferable credit are encouraged to demonstrate proficiency in the core graduate courses through oral examinations.

Graduate students in both the M.A. and Ph.D. programs are required to gain supervised teaching experience either as teaching assistants or teaching fellows in the department, or elsewhere if approved by the department.

More information about the requirements for the Ph.D. and M.A. degrees in physics is available from the Graduate Student Handbook. Copies are available upon request from the graduate-student adviser.

Courses

ASTR001 Exploring the Universe/Lecture, Observatory

Ideas and methods of astronomy for nonscience majors. Devoted to the planets, sun, stars, their life cycles and the galaxies. Concepts from physics, chemistry, biology and geology are discussed. Explores theories of the composition and origin of the solar system, the universe and life. Weekly evening observation sessions – required as part of the course work – connect the wide-ranging lecture and textbook topics to the real world visible in the skies. Additional appropriate observations may also be assigned from time to time. Not available to students who have taken ASTR002. Fulfills the Natural Scientific Perspective. Mr. Agosta/ Offered every fall

ASTR002 The Planets and Space Exploration/Lecture, Observatory

Covers much of the same material as ASTR001, but with more emphasis on the solar system and past and future projects for its exploration. Topics include the sun, comets and asteroids, planetary and satellite surfaces, and planetary interiors and atmospheres. The principles of rocket flight and the motion of objects in the solar system are treated qualitatively and with simple algebra. Weekly evening observation sessions – required as part of the course work – connect the wide-ranging lecture and textbook topics to the real world visible in the skies. Additional appropriate observations may also be assigned from time to time. Not available to students who have taken ASTR001. Fulfills the Natural Scientific Perspective. Mr. Agosta/Offered every spring

PHYS020 Discovering Physics/Lecture, Laboratory

This course emphasizes hands-on experience and the learning of science using approaches paralleling the ways scientists gain new knowledge. Open to all undergraduates. No background in mathematics and science is assumed. Topics include wave and particle phenomena, with an emphasis on the properties of light. Two laboratories and group discussions per week. Discovering Physics uses teaching approaches that may be of interest to students with a concentration in education. Graduate students in education may enroll in Discovering Physics as EDUC359, which includes a science-education research project. Fulfills the Natural Scientific Perspective. Mr. Mukhopadhyay/Offered every year

PHYS040 Science and Society/First-Year Seminar

We examine a few of the many important intersections of science with other areas of intellectual and cultural life. In each case, we will investigate aspects both of the science involved and of the intersecting area, learning about the applicable "ways of knowing" as well as what is known. With this shared background in hand, we will see what understandings we have gained from the confrontations and convergences between the two. No special background in science is required. Topics, selected according to the interests of the participants, may include some of the following: science and religion (for example, the controversy over teaching evolution); science and politics (energy and the environment; genetic engineering and world hunger); science and the arts (light, vision and the reality of images on canvas); and science and social theory (relativity and cultural relativism). Students who enjoy science should enjoy this seminar; students who are ambivalent about (or downright hostile to) science should also enjoy the seminar. Fulfills the Verbal Expression requirement. You must have been placed at the Verbal Expression level to choose this seminar. Mr. Blatt/Offered in occasional fall semesters.

PHYS110 Introductory Physics – Part I/Lecture, Discussion, Laboratory

Introductory-level course stressing both conceptual understanding and problem solving. This is a survey course for both science majors and others. Stresses the simplicity and self-consistency of physical models in explaining a variety of physical phenomena, with special attention to applications in the life sciences. Topics include Newtonian mechanics and an introduction to the thermal properties of matter. Calculus is not required, but elements of algebra and trigonometry are reviewed and utilized. PHYS110, with PHYS111, fulfills the usual entrance requirements for medical and dental schools. Three lectures and one discussion section per week, as well as one laboratory every other week. Fulfills the Natural Scientific Perspective or Formal Analysis requirement. Mr. Landee/Offered every fall

PHYS111 Introductory Physics – Part II/Lecture, Discussion, Laboratory

A continuation of PHYS110. Topics include wave motion, electricity, magnetism, optics and a survey of modern physics. Three lectures and one discussion session per week, as well as one laboratory every other week. The PHYS110-111 sequence is designed to fulfill the usual entrance requirements for medical and dental schools. Fulfills the Natural Scientific Perspective. Mr. Landee/Offered every spring

PHYS120 Introductory Physics – Part I/Lecture, Discussion, Laboratory

A laboratory-based modern mechanics course for science majors. This is a newly redesigned course to include hands-on activities, computer-rich laboratories, group problem-solving and an interactive environment. Two two-hour integrated lecture/discussion/laboratory sessions per week. Coverage is more in-depth than PHYS110. Corequisite: MATH120 or 124. Fulfills the Natural Scientific Perspective or Formal Analysis requirement. Mr. Kudrolli/Offered every fall

PHYS121 Introductory Physics – Part II/Lecture, Discussion, Laboratory

Continuation of PHYS120 offering a more in-depth introduction to physics than PHYS111. The topics of electricity, magnetism, light and optics are discussed. Recommended second semester course for physics, mathematics and other science majors. Three lectures and one discussion session per week, as well as one laboratory every week. Credit is not given for both PHYS111 and 121. Fulfills the Natural Scientific Perspective. Corequisite: MATH121 or 125. Mr. Kudrolli/Offered every spring

PHYS127 Computer Simulation Laboratory/Discussion, Laboratory

Introduces object-oriented programming and methods of computer simulation and its diverse applications. The course is project oriented, with students proceeding at their own pace depending on their background and interests. Projects include planetary motion, chaotic systems, fractal phenomena, random systems, complex systems and thermal systems. Methods include the numerical solution of differential equations, molecular dynamics and Monte Carlo techniques. Two laboratory sections and two discussion periods per week. Fulfills the Natural Scientific Perspective. Prerequisites: PHYS120, MATH120 or 124, or instructor permission. No background in computer programming is required. Mr. Gould/Not offered AY 2007-08

PHYS130 Oscillations, Waves and Optics/Lecture, Laboratory

The third of a four-semester introductory survey of physics. The seminar meets for three hours per week plus an afternoon laboratory. Oscillations and harmonic motion, wave phenomena such as interference, diffraction and standing waves, plus ray and wave optics are some of the topics covered. Key experiments include studies of mechanical, acoustic and optical waves, wave resonance in oscillating systems, construction of optical instruments, and measurement of the speed of light. Prepares the student for the study of quantum systems in PHYS131. Fulfills the Natural Scientific Perspective. Prerequisites: PHYS111 or 121. Corequisite: MATH130. Mr. Kudrolli, Mr. Landee/Offered every fall

PHYS131 Quantum Physics/Lecture, Laboratory

The last in a four-semester survey of physics; intended to follow PHYS130. After an introduction to relativity theory, the course emphasizes the experimental basis of atomic and nuclear structure leading to the development of wave mechanics. The laboratory uses modern research instrumentation to investigate contributions by Einstein, Rutherford, Compton, Moseley, Chadwick and others. Fulfills the Natural Scientific Perspective. Prerequisite: PHYS130; corequisite MATH131. Mr. Kudrolli, Mr. Landee/Offered every spring

PHYS140 Energy and the Environment/Lecture, Discussion

Discusses the central role of energy production, distribution and consumption in human activities, and the range of social, economic and political impacts that follow. Experiments and data analysis will be conducted using the University's campus physical plant as an extended laboratory. Fulfills the Natural Scientific Perspective. Mr. Agosta/Offered periodically

PHYS150 Statistical and Thermal Physics/Lecture, Discussion

Introduces the concepts of thermodynamics and statistical mechanics with the goal of understanding the behavior of macroscopic systems on the basis of microscopic theory. Topics include probability, entropy and the second law of thermodynamics, the Boltzmann probability distribution, heat and work, and the first and second law efficiencies of simple engines. Prerequisite: PHYS130. Mr. Gould/Offered in alternate years (Not offered in AY 2007-08)

PHYS160 Classical Mechanics/Lecture, Discussion

PHYS160 and 161 constitute an introduction to the concepts of classical physics at the intermediate level. Topics include particle and rigid body dynamics in inertial and noninertial reference frames. The necessary mathematical methods are introduced and applied. Prerequisites: MATH131 and PHYS111 or 121. Mr. Kudrolli, Mr. Mukhopadhyay/Offered in alternate years, including AY 2007-08

PHYS161 Electricity and Magnetism/Lecture, Discussion

Continuation of PHYS160. Topics include electro- and magnetostatics and electrodynamics through Maxwell's equations and relativity. Develops useful mathematical methods. Prerequisite: PHYS160. Mr. Landee, Mr. Mukhopadhyay/Offered in alternate years, including AY 2007-08

PHYS171 Atomic and Nuclear Physics/Lecture, Discussion

Intermediate-level course providing an introduction to quantum mechanics and its applications to atoms, nuclei, molecules and solids. Prerequisites: PHYS131 and MATH131. Mr. Agosta/Offered in alternate years (Not offered in AY 2007-08)

PHYS201 CLASSICAL DYNAMICS/LECTURE, DISCUSSION
Designed to prepare students for graduate work in physics. Topics include Hamilton's principle, classical scattering theory, rigid body motion, canonical transformations, Hamilton-Jacobi theory and mathematical methods of physics. Lectures are the same as PHYS301, but the assignments and evaluation are separate. Prerequisite: PHYS160 and 161. Staff/Offered every fall

PHYS202 ELECTRODYNAMICS/LECTURE, DISCUSSION
Designed to prepare students for graduate work in physics. Topics include boundary value problems in electrostatics and magnetostatics, electromagnetic-field equations and special relativity, electromagnetic waves, radiation theory, multipole fields and mathematical methods of physics. Lectures are the same as PHYS302, but the assignments and evaluation are separate. Prerequisite: PHYS161. Mr. Mukhopadhyay/Offered every spring

PHYS205 QUANTUM MECHANICS – PART I/LECTURE
PHYS205 and 206 constitute a comprehensive introduction to the concepts of quantum mechanics and their application in physics and chemistry. Sequence prepares students for graduate work. Lectures are the same as in PHYS305, but the assignments and evaluation are separate. Prerequisites: PHYS171 and MATH131. Staff/Offered every fall

PHYS206 QUANTUM MECHANICS – PART II/LECTURE
PHYS206 is a continuation of PHYS205. Prerequisite: PHYS205. Staff/Offered every spring

PHYS209 STATISTICAL MECHANICS/LECTURE, DISCUSSION
Designed to prepare students for graduate work in physics. The lectures are the same as in PHYS309, but the assignments and evaluation are separate. Prerequisites: PHYS150 and 171. Staff/Not offered AY 2007-08

PHYS219 ELECTRONICS LABORATORY/LECTURE, LABORATORY
Examines principles of modern electrical measurement and control. Introduces DC- and AC-circuit theory and use of test instruments such as multimeters and the oscilloscope. Emphasizes electronic circuit design, operational amplifiers and digital circuits. Two lectures and one laboratory each week. Suitable for intermediate-level undergraduates and graduate students in the sciences. Mr. Agosta/Offered every other year; offered Spring 2008

PHYS290 SENIOR SEMINAR/SEMINAR
This capstone covers a selection of topics of current interest in physics. Offered for variable credit. Staff/Offered periodically

PHYS299 DIRECTED STUDIES IN PHYSICS
Independent student work in physics with the guidance of a faculty adviser. With permission of the instructor, students may enroll for senior capstone or honors projects, directed readings in areas not covered in regular courses, or independent research in theoretical, experimental or applied physics. Offered for variable credit. PHYS299 may be taken more than once. Staff/Offered every semester

PHYS301 CLASSICAL DYNAMICS
Graduate-level course in classical mechanics. Topics are similar to PHYS201, but are treated in greater depth. Staff/Offered every fall

PHYS302 CLASSICAL ELECTRODYNAMICS
Graduate-level course in classical electromagnetism. Topics are similar to PHYS202, but are treated in greater depth. Mr. Mukhopadhyay/Offered every spring

PHYS303 RESEARCH APPRENTICESHIP
Students participate actively in an experimental or theoretical research group. Ph.D. students enroll in the course for three semesters with a minimum of one semester in a theoretical group and one semester in an experimental group. M.A. students take a minimum of one semester. Staff/Offered every semester

PHYS305 QUANTUM MECHANICS – PART I/LECTURE, DISCUSSION
PHYS305 and 306 offer a comprehensive introduction to quantum mechanics and its application in physics and chemistry. Topics include the foundations of quantum mechanics, symmetries and angular momentum, particle in a central potential, electron spin and perturbation theory. Staff/Offered every fall

PHYS306 QUANTUM MECHANICS – PART II/LECTURE, DISCUSSION
PHYS306 is a continuation of PHYS305. Topics include scattering theory, interaction of radiation with matter, second quantization, applications to simple atoms and molecules and an introduction to many-body theory. Staff/Offered every spring

PHYS309 STATISTICAL MECHANICS/LECTURE, DISCUSSION
Examines statistical mechanics with applications to physical systems. Topics include ensemble theory, the statistical basis of thermodynamics, quantum statistics, the virial expansion of a classical gas, ideal Bose and Fermi systems, the renormalization group and fluctuations. Staff/Not offered in AY 2007-08

PHYS310 SOLID STATE PHYSICS/LECTURE, DISCUSSION
Examines experimental properties and the quantum theory of solids. Topics include crystal and reciprocal lattice structures, the free-electron theory of metals, electronic band structure and the Fermi surface, lattice vibrations and the elementary excitations of solids. Prerequisite: PHYS305 or permission of instructor. Mr. Landee, Mr. Mukhopadhyay/Not offered in AY 2007-08

PHYS319 ADVANCED ELECTRONICS LABORATORY/LECTURE, LABORATORY
Similar to PHYS219, but more advanced. Topics are treated in greater depth. Suitable for graduate students in the sciences. Mr. Agosta/Offered every other year; offered Spring 2008

PHYS320 ADVANCED SEMINAR IN PHYSICS
Provides for special coverage of topics in physics of current research interest. Offered for variable credit. Staff/Offered periodically

PHYS325 RESEARCH SEMINAR
Student participation seminar on current research problems. Offered for variable credit. Staff/Offered periodically

PHYS327 ADVANCED COMPUTER SIMULATION LABORATORY
Similar to PHYS127 but more advanced. Suitable for graduate students in the sciences or undergraduates who have completed PHYS127. Prerequisite: PHYS127 or instructor permission. Mr. Gould/Not offered AY 2007-08

PHYS390 COLLOQUIUM
Weekly invited lecturers speak on current research topics. Required for all graduate students and recommended for undergraduates involved in research. Not offered for credit. Staff/Offered every semester

PHYS397 RESEARCH
Thesis and dissertation preparation. Offered for variable credit. Staff/Offered every semester

Program Faculty

Michael Addis, Ph.D. - *Chair*
Michael Bamberg, Ph.D.
Nancy Budwig, Ph.D.
Esteban Cardemil, Ph.D.
James Cordova, Ph.D.
Joseph de Rivera, Ph.D.
Rachel Falmagne, Ph.D.
Abbie Goldberg, Ph.D.
Wendy S. Grolnick, Ph.D.
Lene Jensen, Ph.D.
James Laird, Ph.D.
Jaan Valsiner, Ph.D.
Marianne Wiser, Ph.D.

Adjunct Faculty

Linda Kennedy, Ph.D.

Part-Time Faculty

Robert Ciottone, Ph.D.
Lisa Comparini, Ph.D.
Cathleen Crider, Ph.D.

Research Faculty

Jeffrey Arnett, Ph.D.
Elaine Reese, Ph.D.
Penelope Vinden, Ph.D.

Visiting Faculty

Denise Hines, Ph.D.
Abigail Mansfield, Ph.D.

Emeriti Faculty

Roger Bibace, Ph.D.
David Stevens, Ph.D.
Nicholas Thompson, Ph.D.

Program Overview

The department provides educational experiences that both contribute to liberal-arts education and prepare students for graduate work in psychology or related disciplines. The program emphasizes the role of psychological scholarship in understanding human behavior and experience. The program culminates in small and intensive capstone courses that offer students an opportunity to participate fully in the theoretical and research life of the department.

Undergraduate Requirements

The seven introductory courses provide a foundation in the content and method of psychology and should normally be completed by the end of the sophomore year. The introductory courses include PSYC101 General Psychology, three methods courses, PSYC105 Quantitative Methods, PSYC108 Experimental Methods, and PSYC109 Qualitative Methods, and at least one course from each of three broad content areas of psychology. These are:

Basic Processes (BP): Courses in evolutionary psychology, physiological psychology, learning, sensation and perception, and cognition. Choose from:
BIOL140 Biology of the Brain
BIOL141 Brain and Behavior
PSYC120 Human Cognition
PSYC130 Psychology of Learning
PSYC142 Sensation and Perception
PSYC145 Psychophysiology

Development (DEV): Courses in historical, cultural and human developmental psychology. Choose from:
PSYC150 Developmental Psychology
PSYC151 Psychology of Aging
PSYC152 Adolescent Development
PSYC156 Cultural Psychology
PSYC157 Cultural Psychology of Urban Living
PSYC158 Discourse, Subjectivity and Self

Social/Personality (S/P): Courses in social, clinical, personality and abnormal psychology. Choose from:
PSYC170 Social Psychology
PSYC172 Psychology of Personality
PSYC173 Introduction to Abnormal Psychology
PSYC175 Introduction to Clinical Psychology
PSTD176 Introduction to Peace Studies and the Psychology of Peace

Declaring a Psychology Major and Related Field

A student nearing the end of his or her sequence of introductory courses should come to the department office to declare a major and be assigned a psychology adviser. This formality will normally occur by the spring of a student's sophomore year. When declaring a major, a student must also choose a related field. The related field requirement reflects the conviction of the faculty that all academic areas are usefully related to psychology and that understanding the relation between psychology and another discipline requires knowing that other discipline in considerable depth. A related field is generally a recognized six-course concentration or minor. Alternatively, a student may adopt as a related field any pattern of six courses that his or her psychology adviser has approved as providing depth of knowledge in a discipline related to psychology.

Mid-Level Courses

In addition to the above seven introductory courses, majors must take two mid-level courses that provide experience with the two fundamental activities of academic psychology, the analysis and interpretation of psychological literatures and the conduct of psychological investigations. Students complete at least one each of the following types of mid-level courses by the end of the junior year.

First Seminars focus on the attentive analysis of psychological texts, the articulation of opinions concerning psychological issues, and the use of library and reference skills in psychological writing. (Permission to take a capstone seminar as a first seminar will not ordinarily be given and must, in any case, be obtained in writing in advance from the faculty member involved.) Choose one from numbers PSYC240-259.

Laboratories focus on doing psychological research including planning, data collection, analysis, interpretation and presentation. (Choose from numbers PSYC200-214.) The laboratory requirement may be fulfilled by taking a research course.

Research courses are opportunities to participate in faculty and/or graduate-student research projects, in all stages of the research process from conceptualization to presentation. The work normally terminates in an Academic Spree Day presentation and/or co-authorship of a scholarly paper or conference presentation. Students desiring to join a research course should make arrangements with a faculty sponsor well in advance. In approaching faculty members to make these arrangements, students should bear in mind that research courses are taken on as an addition to a faculty member's normal teaching load and space is limited. Choose from numbers PSYC215-235. In rare instances, this requirement may be met by research experience done for credit in another department. In such cases, PSYC101, 105, 108, and 109 must have been completed, and the proposed project approved before course registration and after course completion.

Capstone Courses

Capstone courses provide an opportunity for students to participate more intensively in the analysis of a psychological literature or the pursuit of empirical research in psychology. Thus, the capstone requirement may be fulfilled by taking one of two kinds of courses.

Capstone seminars are open to undergraduates and are taught at or near the graduate level. Choose from numbers PSYC260-299.

Capstone Research: Students fulfilling the capstone requirement with a research course should notify the faculty member when they seek permission for the course. Capstone research students should expect to write a substantial research report describing the theory, methods, statistical method, results and conclusions of the project they conducted.

Honors Program

Honors work in psychology is available as a three-semester honors sequence, beginning in the spring semester junior year, to students who have demonstrated high scholastic achievement and the ability to work as scholars. Students apply, in conjunction with a faculty sponsor, in the fall semester of their junior year by submitting an application to the department. Materials should be submitted to Professor James Cordova (jcordova@clarku.edu), who will then notify students whether the department's faculty committee has accepted them for admission. The honors sequence is a series of three courses designed to provide honors students with more in-depth knowledge of the history of psychology, philosophy of science, psychological theory, and psychological methods of inquiry. Students in the program carry out an independent research project under the sponsorship of one or more faculty members. This research provides the basis for a thesis that, upon completion, is presented and defended by the student before an examining committee and the student's project adviser. Level of honors (highest honors, high honors, or honors in psychology) is determined by the full department on the basis of recommendations from its examining committees. The honors major should be especially, but not uniquely, attractive to students interested in pursuing graduate study in psychology or another related discipline such as medicine, teaching and law.

This represents a change in the honors program. Other noteworthy points:

- Beginning in 2008-09, junior honors will be required to participate in senior honors. This means that anyone who wants to do an honors project in the academic year 2008-09 will have to be registered for junior honors in the spring semester of 2008.
- In 2007-08, all honors students will be grandfathered in under the current system in which senior honors is independent of junior honors. In other words, 2007-08 will be the last year that it will still be possible to take senior honors without having taken junior honors.
- Students interested in study abroad will be encouraged to spend the fall semester of junior year abroad and then participate in junior honors in the spring semester of junior year.

Graduate Program

The M.A. degree is not required for completion of the doctoral degree. All students complete an independent research project by the end of their second year and present the results at a departmental conference. Students may choose to write up their research in the form of a master's thesis and submit it to the graduate school in order to receive an M.A. degree.

Graduate Training in Clinical Psychology

The Clinical Psychology Training Program at Clark University trains its doctoral students to be skilled scientists and clinicians. In keeping with the scientist-practitioner model, we train psychologists who can integrate the skill sets of a scientist with those of a clinician. Our goal is to develop scientist-practitioners with a clear grounding in theory, who think critically about the relationship among problem, theory and method, and who are able to contribute to theory development and the evaluation of evidence in both clinical and research settings. For example, we expect students in our program to become skilled at carefully identifying and defining the relevant clinical issue or problem, formulating an understanding of the problem from one of multiple theoretical viewpoints, specifying how to approach the issue from a particular viewpoint, and choosing appropriate research and/or clinical strategies. We believe that this particular emphasis enables our graduates to skillfully integrate their research and clinical training and to actively contribute to the creation of new models of intervention and inquiry. To achieve the goal of training psychologists who become leaders in the field, we provide a foundation in general psychology, theory and research, as well as specialist training in clinical psychology through a series of sequential, cumulative and integrated educational experiences in classroom, laboratory and practicum settings. Individuals whose career goals are exclusively focused on clinical service delivery are not likely to find the program to be satisfying in terms of the philosophy embraced or the breadth of clinical training offered. The clinical-training program includes course work and practice with adults and children. In addition to more traditional training, the program offers opportunities in child clinical and marital-and-family intervention.

The program for the Ph.D. in clinical psychology has, in addition to the general requirements, the following special requirements: Each student must take at least one course from each of three areas:

- biological aspects of behavior (e.g., physiological psychology, behavior and evolution, human neuropsychology)
- cognitive-affective aspects of behavior (e.g., symbolism, cognitive development, logical reasoning, action and emotion)
- social aspects of behavior (e.g., interpersonal relations, social cognition)

Each student must take PSYC311 Psychopathology and PSYC310 Theories of Psychotherapies. Each student must complete a minimum of a one-year internship in clinical settings. All clinical students participate for four years in practicum training offered at the University or other agencies. For further information contact the director of clinical training, James Cordova, at jcordova@clarku.edu. The clinical-psychology program is currently accredited by the American Psychological Association (APA). For more information, the APA Committee on Accreditation can be contacted at 750 First Avenue, N.E., Washington, D.C. 20002-4242, (202) 336-5500, (202) 336-6123 TDD.

Graduate Study in Developmental Psychology

The developmental psychology curriculum is intended to prepare students for a career in research, teaching and scholarly activity. It strives to impart both theoretical sophistication and competence in observational, experimental, interpretative and comparative inquiry with regard to developmental issues. Emphasized are ways of representing and examining all life phenomena, rather than focusing exclusively on a particular population (e.g., infants, children, adults) or a specific subject matter. In-depth study is offered with particular populations and in specific areas bridging social, cognitive and language development. Students with a concentration in developmental psychology are required to enroll for two semesters in PSYC300 Developmental Psychology Forum and take a series of six graduate developmental seminars. These eight courses satisfy, at the same time, the content courses requirement of the graduate program. Since there are no sharp separations between different areas within the department, students who work primarily in developmental psychology have the opportunity to study with other faculty in the department who have an interest in their area of specialization.

Distinctive features of the program include a strong interest in theoretical perspectives, a concern with the relationship between problems and methods of inquiry, and an attempt to place questions in their historical and cross-disciplinary contexts. Faculty interests intersect around topics in the development of psychological processes in societal and cultural context, specifically in the development of conceptualization and reasoning, in the study of social relations and interpersonal interactions, development of languages, symbolization and communication, and study of the relation of environmental conditions to functioning.

Research facilities in the department include a child-study area. There are opportunities for research in the schools and in other community settings. The Goddard Library has an extensive collection of books and journals going back to the inception of graduate study in psychology in the United States. Computer facilities are available on campus and in the department. For additional information about study in developmental psychology, e-mail Marianne Wiser at mwiser@clarku.edu.

Graduate Study in Social, Evolutionary and Cultural Psychology (SEC)

Clark's program in Social, Evolutionary and Cultural Psychology integrates three perspectives. The social psychological perspective examines human interactions from the point of view of the experiences of self and the emotional feelings and action of the individuals that participate in them. At Clark, it includes the study of group dynamics, intergroup relations and societal peace and conflict. The biological-evolutionary perspective examines humans' interactions against the background of their evolutionary history, looking for enduring themes that persist in contemporary human social behavior. The cultural psychological perspective examines the manner in which presuppositions arising from language, culture and social and political ideology interact with our basic natures to produce human experience and behavior. The program encourages interdisciplinary research, as well as novel projects (e.g., our E-motion project) and research-action paradigms (such as our Peace Studies Program). Members of the SEC program, both faculty and students, work together to design courses that meet their interests, as well as those of the department as a whole. For further information, contact Joseph de Rivera at jderivera@clarku.edu.

Graduate Study in Other Areas

Other current interests of the faculty include feminist approaches to thinking and self, cognition and instruction, and the psychophysics of taste and smell. Teaching and research emphasize theoretical relevance and preserving and exploring the connections among areas of specialization. Faculty and students typically maintain extensive and regular interactions. In particular, most of the faculty have close connections with all the programs. The department also has education research ties with a number of institutions in the Worcester-Boston area (e.g., the Neuropsychology Unit of the Boston Veterans Administration Hospital, the Worcester Foundation for Experimental Biology, the University of Massachusetts Medical School), as well as other departments at Clark. For further information, write to, Michael Addis, department chair, at maddis@clarku.edu.

Frances L. Hiatt School of Psychology

The Frances L. Hiatt School of Psychology, formed in 1987, has a major endowment provided through the generous support of the Hiatt family. The school, which encompasses the Psychology Department with the Heinz Werner Institute for Developmental Analysis and the Department of Education, provides, in addition to Frances L. Hiatt Graduate Fellowships, opportunities for organizing and attending conferences and support for travel and research activities for the school's faculty and students.

The Heinz Werner Institute for Developmental Analysis

Associated with the department is the Heinz Werner Institute for Developmental Analysis, which has three aims: to integrate various research programs dealing with developmental problems; to attract scholars, teachers and research workers from disciplines for which developmental problems are pertinent, such as anthropology, biology and certain areas of medicine; and to train research workers on postdoctoral levels in the comparative-developmental approach to behavior.

Doctoral Program General Requirements

Only those students who plan to enroll in the Ph.D. program on a full-time basis are admitted for graduate work. The aim of the program is to provide students with a general integrated background covering the various areas of psychology. Specialization in several areas of study is available. Although a small department cannot reflect the entire spectrum of perspectives toward the study of psychology, a considerable number of theoretical orientations are demonstrated by the faculty. Important emphasis is placed on theoretically grounded inquiry and conceptually and methodologically rigorous research. In all programs, including the clinical program, there is a deep concern with conceptual analysis and theoretically grounded and directed inquiry. Unique is the diversity of methods of investigation used by faculty and graduate students in their work and the range of problems taken to fall within the purview of psychologists. Students are acquainted not only with traditional experimental and naturalistic methods, but also with phenomenological, structural, hermeneutic and other methodologies. Participation in research is strongly encouraged, the nature of which is determined by interests a student shares with faculty members. Students are expected to contribute significantly to problem formulation, conceptualization, methodology, analysis and write-up of research work.

Advisers

A faculty adviser will be assigned to help each student plan a curriculum to best meet individual needs and goals. The adviser may change or waive any of the requirements of specific training programs with department approval, but ordinarily the adviser's function is to assist students in selecting a curriculum from within the normal requirements. In addition to course selection, the adviser will work with the student to develop a portfolio of scholarly and professional accomplishments.

Course work

Students ordinarily are expected to take four courses in each semester for their first two years, including PSYC301 Problem, Theory and Method in Psychology and PSYC302 Statistical Methods in their first year. In subsequent years, students continue to enroll in a full program which ordinarily includes three or four content courses and research and reading courses. A total of at least 16 one-semester content courses is required for admission to candidacy for the Ph.D. There are special course distribution requirements in effect for clinical students, and clinical applicants should consult the section on Training in Clinical Psychology for information about course requirements. Content courses include: all graduate seminars; clinical methods courses; Statistical Methods; Problem, Theory, Method; and courses numbered 300-379 and 390-399. (Topics are similar to capstone seminars but are treated in greater depth.) Up to four directed-reading courses may be taken as content courses after the second year and with the supervising faculty member's approval.

Research in the First Year

To encourage each student to become actively involved in research from the beginning of graduate training, a research apprenticeship program exists through which faculty and students can voluntarily begin working on research together during the first year. Participating faculty provide a brief description of current research projects in which students can become involved or notify students about when their project meetings are held. During the first two weeks of each year students have the opportunity to consider these projects and contact a faculty member to discuss becoming an apprentice in the described research project.

Qualifying Projects

In order to advance to candidacy for the doctoral degree, students must complete six elements of a qualifying portfolio by the end of their third year in the program. Students are expected to complete two elements per year to stay on track towards completion of the portfolio. Elements may be papers written under the supervision of a faculty member, manuscripts submitted for publication, conference presentations or grant proposals. Students are expected to form a portfolio committee of three faculty members by the end of their first semester, with the primary research adviser serving as chair. The committee oversees and approves elements of the portfolio. The student is responsible for maintaining steady progress of the portfolio and for meeting stated deadlines. Written feedback regarding progress on the portfolio will be provided bidirectionally each year by the student and the primary research adviser.

Examination in Statistical Methods

Students are required to demonstrate competence in statistical methods by satisfactory performance on an examination in that area. The examination is normally taken in two parts during the student's first year, at the completion of each semester of the course in PSYC302 Statistical Methods.

Ph.D. Dissertation Proposal Defense

Once in final form, the dissertation proposal will be presented and defended by the candidate in a meeting with the three faculty on the dissertation committee. This defense, which is based on questions and discussions (no presentation of the proposal) is intended to demonstrate the candidate's command of the relevant base and of the rationale of the proposed study, and the candidate is expected to be able to substantiate theoretical and procedural aspects of the research. It is expected that the proposal presented will be satisfactory in substance in most cases, since it will normally be developed in consultation with members of the candidate's dissertation committee.

Ph.D. Dissertation

Students demonstrate the ability to conduct research by the presentation of an acceptable dissertation. The topic of the dissertation usually is selected by the student working with one or more members of the faculty. Once students have worked out a general research plan, a dissertation committee is formed to supervise and assist in all phases of the research effort, from articulation of the research design to the write-up of the final draft. After completion of the research, students submit a draft of the dissertation to the committee, which will aid students in making necessary revisions. At the point that the committee decides that the dissertation is complete and ready for presentation, the oral examination is scheduled.

Ph.D. Oral Examination

Following submission of the dissertation, a final two-hour oral examination is held in which students present and defend their dissertation. The dissertation will be presented publicly to the psychology faculty and graduate students (and guests where appropriate), and open to questions from the faculty. The format is similar to that of a professional presentation (job talk or colloquium). The candidate is expected to demonstrate his/her ability to address questions on the theoretical frame, the substantive questions, and the findings of his/her work and on related matters, both from experts in their immediate area and from broadly informed members of the audience. The dissertation oral will include the committee and an additional two or three faculty members appointed by the department chair. The selected readers must be specialists in the field (at the level of Ph.D. or its equivalents), including affiliated, adjunct faculty, visiting and postdoctoral scholars, aside from full-time faculty. In case of expertise needed, committee members may be invited from other universities to participate in the final oral examination. Optimally, all faculty with generally related interest and knowledge will attend. The oral will be chaired by the department chair or designee. The Ph.D. must be completed in six years (excluding an internship year or official leave). An additional year may be granted by faculty approval of a petition on other grounds, such as part-time study because of financial necessity.

Postdoctoral Opportunities

The Psychology Department is in the process of establishing a postdoctoral program in all areas where it currently offers doctoral degrees. International postdoctoral visitors have been the core of the present program, and federally funded postdoctoral positions for U.S. citizens are expected to be established in the near future.

Courses

PSYC101 General Psychology/Lecture, Discussion

Introduction to the principles of human behavior and to the various subdisciplines of psychology. No prerequisite. Unless otherwise noted, this course is a prerequisite to all other psychology offerings. Discussion attendance required. Ms. Goldberg, Mr. Cardemil/Offered every semester

PSYC105 Quantitative Methods/Lecture, Discussion

Introduction to descriptive and inferential statistics for the social sciences. Prerequisite: PSYC101. Staff, Ms. Hines/Offered every semester

PSYC108 Experimental Methods in Psychology/Lecture, Discussion

Presents the principles of the scientific method and methods of experimental research in psychology. The relations between experimental design and quantitative analyses are examined. Students will participate in the design of an experimental study including a search of relevant literature, the collection of data and will submit a report of the experiment. This course is a prerequisite for all laboratory and research courses. Prerequsite: PSYC101, 105 Ms. Mansfield/Offered every semester

PSYC109 Qualitative Methods in Psychology/Lecture, Discussion

Covers the principles of engagement in qualitative inquiry—with particular emphasis on observing, interviewing and analyzing people in interaction. Classes take the form of a mix between lecture and discussion, supplemented by an individually conducted observation project, and an interview that is carried out as a small group project. Prerequisite: PSYC 101 Mr. Bamberg/Offered every semester

PSYC120 Introduction to Cognition/Lecture, Discussion

The course provides an overview of some of the cognitive functions that comprise our mental life as we function in the world, such as thinking, concepts, memory, attention, language, problem solving and decision making. We examine the mental processes that underlie these functions, and how those aspects of thought are interconnected. The objective of the course is to acquaint students with some of the concepts and findings that cognitive psychologists have developed and to stimulate critical thinking about different theoretical approaches to psychology and about ways in which work from cognitive psychology can contribute to an understanding of human functioning in social and cultural context. The assumptions underlying the perspective of cognitive psychology are discussed and the extensions and contributions of that approach to sociocultural, clinical and developmental questions are explored. Prerequisite: PSYC101 or permisssion. Ms. Joffe Falmagne/Offered every year

PSYC130 Psychology of Learning/Lecture

Focuses on historical and current issues in the psychology of learning. Topics include classical and operant learning, the role of language and cognition, and continuity and discontinuity in human and nonhuman species. Ms.Mansfield/Offered periodically

PSYC140 Biology of the Brain/Lecture, Laboratory, Discussion

See Biology 140.

PSYC141 Brain and Behavior/Lecture, Discussion

See Biology 141.

PSYC142 Sensation and Perception/Lecture, Discussion

Sensation, perception and cognition work together to give us meaningful information about the world. This course examines how information is picked up from the environment and then coded, transformed and integrated by the sensory systems with special emphasis on vision. Topics include basic visual and auditory functions, vision abnormalities and deafness, taste, touch and pain, and how babies perceive the world. Ms. Wiser/Offered every year

PSYC145 Psychophysiology/Lecture

Deals with how the activities of the body outside of the central nervous system interact with, reflect or produce psychological states and processes. Topics will include the functioning of the autonomic nervous system; techniques for measuring autonomic and other bodily activities; the role of bodily activities in emotions and other feelings; lie detection; the impact of stress on autonomic functioning and on immune system function; the effects of meditation, exercise and biofeedback on physiology and experience. Mr. Laird/Offered every year

PSYC150 Developmental Psychology/Lecture, Discussion

Discusses the development of biological, cognitive and social functioning from conception to adolescence. Emphasizes and contrasts theoretical approaches to conceptualizing changes in developing children in light of current research. Ms. Comparini/Offered every semester

PSYC151 Psychology of Aging/Lecture, Discussion

Development from young adulthood through old age is considered with an emphasis on current developmental theories and psychopathological conditions. This course is designed to introduce the student to the study of the developmental changes that occur in adulthood and during the aging process. After completing this course, the student should: understand the physical, social, emotional, intellectual and personality changes that take place from young adulthood through old age; understand the current theories of development in adulthood; be able to better analyze and evaluate current research findings presented in the media; and be prepared for future classes, research experiences or other endeavors in the field. Staff/Offered periodically

PSYC152 Adolescent Development/Lecture

This course is designed to introduce students to the major theories and research on adolescent development. The course emphasizes both individual development and cultural influences and encourages students to consider the influence of multiple settings, historical time and individual differences on the adolescent experience. This course not only offers students the opportunity to learn in a text-and lecture-based setting, but also encourages students to draw upon their personal experiences, knowledge and professional goals as guides for understanding the complexity of adolescent development and adjustment. Prerequisite: PSYC101. Mr. Arnett/Offered periodically

PSYC156 Cultural Psychology/Lecture, Discussion

Provides a systematic overview of knowledge about cultural organization of human psychological functions, and how psychology as a research discipline can study these functions. Strong theoretical and methodological orientation is included. Mr. Valsiner/Offered every spring

PSYC157 Cultural Psychology of Urban Living/Lecture, Discussion
The focus is to provide the students with skills of observational research in culturally structured open spaces (urban settings). Research tasks will be set up for the students in different cultural contexts in the local environment. The students will carry out an observational and a naturalistic-experimental study and write a research report. Fulfills the Global Comparative Perspective. Prerequisite: PSYC101. Mr. Valsiner/ Offered periodically

PSYC158 Discourse, Subjectivity and Self/Lecture, Discussion
Provides a multiple perspective approach to subjectivity and the self: biological, cognitive-experimentalist, experiential, social constructionist and psychodynamic. Examines the role of discourse in how the self is constructed with special emphasis on developmental aspects. Mr. Bamberg/Offered periodically

PSYC170 Social Psychology/Lecture, Discussion
Examines love, fear, conflict and other basic processes involved in group dynamics, interpersonal relations, community psychology, intergroup relations, organizational behavior and the interface between human nature and culture. These basic processes are related to the attempt to achieve a world of peace and justice. In addition to quizzes and a final exam, students are asked to apply their knowledge of basic processes in a personal or political action. Prerequisite: PSYC101 or instructor's permission. Staff/Offered every year

PSYC172 Psychology of Personality/Lecture
Considers theories regarding behavioral differences among persons in response to the same or similar situations: includes typological, trait, psychoanalytic, traditional and neobehavioristic, and personological conceptions. Mr. Cordova, Ms. Hines/Offered periodically

PSYC173 Introduction to Abnormal Psychology/Lecture, Discussion
Discusses the manner in which abnormal behavior has been traditionally defined and the implications of these definitions. Provides a comprehensive overview of the major categories of abnormal behavioral disorders with an emphasis on theory and research (e.g., schizophrenia, affective disorders, substance abuse, eating disorders, etc.). Special attention is paid to issues of assessment, intervention, legal issues and prevention. Prerequisite: PSYC101. Ms. Grolnick, Mr. Cardemil/ Offered periodically

PSYC175 Introduction to Clinical Psychology/Lecture, Discussion
Surveys various approaches to clinical assessment and intervention. Emphasizes the assumptions underlying alternative approaches and the actual activities of clinical psychologists. This course also covers special topics including ethics, health psychology, clinical neuropsychology and forensic psychology. Prerequisite: PSYC101. Mr. Addis/Offered periodically

PSYC176 Introduction to Peace Studies/Lecture
See Peace Studies 101.

PSYC190 Taking Sides/First-Year Seminar
This seminar, designed for first-year undergraduates, introduces students to some of the focal theories in developmental psychology, while guiding students to discover the ways in which these theories (both historical and current) impact the lives of young children. Scholarly in-class discussions and group projects to be completed with peers help first-year students to develop critical-thinking skills through hands-on analyses of cultural discourse related to child development and socialization. Fulfills the Verbal Expression requirement. Ms. Comparini

PSYC191 Psychology of Men and Masculinity/First-Year Seminar
Only recently has the behavior and experience of men, as men, come to the foreground in the social sciences, particularly in psychology. Prior to the critical advances of feminist scholars, what was "male" was typically considered normative. People rarely stopped to think about men's behavior as a function of biological, social, cultural and interpersonal aspects of "masculinity." This course is intended to "problematize" masculinity through critical analysis of readings, discussion and written interpretation of real-life examples. Students will learn to notice what's taken for granted about the nature of men, and what aspects of masculinity might not be so obvious, and to use this knowledge in their educational and personal lives. For example, what do we mean when we use the terms "masculinity," or "masculine" in everyday life, or in psychology? In what ways are men's and women's behavior influenced by social and cultural definitions of what it means to be a man? What role do biological factors play? How are men's experiences shaped by power relations between men and women, power relations between men and other men, or a man's early attachment to and separation from his caregivers? Is the study of the psychology of men and masculinity necessarily about sex differences between men and women? Through repeated analysis of these issues in the context of different theoretical viewpoints, students will be exposed to several of the fundamental debates current in psychology and other social sciences. Fulfills the Global Comparative Perspective. Mr. Addis

PSYC193 Discourse, Self and Gender/First-Year Seminar
This seminar explores how people make sense of themselves by what they say and how they say it ('discourse') – with a focus on how teenage boys construct themselves as "male." Since this course carries the Language and Culture Perspective, it is expected that students will acquire the basic skills in grammar and syntax necessary for in-depth analyses of discourse. Students will be expected to commit themselves to a high-level academic atmosphere and to a challenging workload that will result in stimulating class discussions. Fulfills the Language and Culture Perspective. Mr. Bamberg/Offered periodically

PSYC194 Foundations of Psychology/First-Year Seminar
This seminar is for first-year undergraduates who are interested in majoring in psychology and who want to gain in-depth insight into the science of psychology in its contemporary state. The students will meet with the seminar leader – psychology faculty – weekly and will cover the introductory materials into psychology through discussion and writing of research papers. Mr. Valsiner/Offered periodically

PSYC196 Psychology through History/First-Year Seminar
This seminar for first-year undergraduates will help students get a head start for a future in psychology from an interdisciplinary focus. This course entails the investigation and discussion of great literary and philosophical works that have a profound influence on today's academic psychology. Students will learn the contextual relevance that surrounds the past and present. Students will also learn to efficiently and rigorously investigate and report on texts significant to psychology. Fulfills the Historical Perspective. Staff/Offered periodically

PSYC201 Laboratory in Social Psychology/Laboratory, Discussion
General principles of experimental design are learned through the design and performance of original experiments in experimental social psychology. Both group and individual experiments are conducted in any of the usual topic areas of social psychology. Prerequisites: PSYC101, 105, 107 Mr. de Rivera/Offered periodically

PSYC202 LABORATORY IN DEVELOPMENTAL PSYCHOLOGY/ LABORATORY, DISCUSSION

A general introduction to conceptual issues related to research in the area of human development. Students participate in group research projects involving observational and experimental techniques and receive training in all phases of research, including formulating research questions, data collection and analysis, and report writing. Prerequisites: PSYC105, 107 and 150. Staff/Offered every year

PSYC203 LABORATORY IN THINKING PROCESSES/LABORATORY, DISCUSSION

Introduces students to the how-to of doing qualitative interview research on reasoning. The course provides an introduction to interview methods and qualitative data analysis, to some of the existing qualitative research on reasoning, and on how to construct a specific research question. Students then conduct studies on such questions as: How do people reason about the causes of everyday events and of social problems? What kinds of processes do people use to sort out contradictory accounts? How do people draw conclusions from given information? There will be flexibility for students to engage more deeply in content areas of particular interest to them. Prerequisites: PSYC105, 107. Ms. Falmagne/Offered periodically

PSYC204 LABORATORY IN EMOTION AND MOTIVATION/LABORATORY, DISCUSSION

A study is designed to examine how individual or collective emotions influence behavior. Data are gathered, analyzed and reported. Prerequisites: PSYC105, 107 and instructor's permission. Mr. de Rivera/Offered periodically

PSYC206 LABORATORY IN PERSONALITY/LABORATORY, DISCUSSION

Examines issues and problems in psychological research in personality, with the problems being exemplified in class and in individual studies. Research may be in conventional areas of personality research, such as perceptual defense, motives and performance, self-perception, experimenter influence and emotions. Prerequisites: PSYC105, 107, 172. Staff/Offered every year

PSYC207 LABORATORY IN CULTURAL PSYCHOLOGY

Examines how research in cultural psychology can be conducted on the basis of materials available in the public domain—verbal and visual records, descriptions of psychological issues in literatures from different countries, and in introspection. Prerequisite: PSYC101 or PSYC196. Staff/Offered annually

PSYC211 LABORATORY IN COMMUNITY PSYCHOLOGY/LABORATORY, DISCUSSION

Concerned with the prevention of mental-health problems and enhancement of individual functioning through the strengthening and empowerment of communities. Weekly lectures introduce essential principles and methods. In weekly laboratory settings, students design, conduct and evaluate their own community-research projects. Designed for students already actively engaged in neighborhood or community-based initiatives. Prerequisites: PSYC105, 107, 172 and instructor's permission. Staff/Offered periodically

PSYC212 LABORATORY IN GENERAL PSYCHOLOGY/LABORATORY, DISCUSSION

Students develop research skills by investigating various aspects of human behavior and experience. Students can test hypothesis of their own or one provided by the instructor. Prerequisites: PSYC105, 107. Staff/Offered periodically

PSYC213 LABORATORY IN FAMILY PROCESSES/LABORATORY, DISCUSSION

Examines family-based correlates of early socioemotional development. Both self-report and observational methodology are used to assess individual, dyadic and whole family functioning. Topics vary, but may include studies of dyadic and family play, intimate relationships among married couples, family-based correlates of children's school adjustment and other topics. Prerequisites: PSYC105, 107, 172 and instructor's permission. Staff/Offered periodically

PSYC214 LABORATORY IN INTERVIEWING/LABORATORY, DISCUSSION

Enables students to use interviews as a research tool productively and responsibly, with emphasis on structured, focus-group and unstructured (qualitative) interviews. The different approaches and techniques will be explored theoretically and with practical exercises. A valuable research prerequisite for doing honors work in the social sciences. Prerequisite: PSYC107 or instructor's permission. Mr. Bamberg/Offered periodically

PSYC215 RESEARCH IN EMOTION/LABORATORY, DISCUSSION

Working in close collaboration with the instructor, students design, conduct and present a piece of research that investigates an emotional or motivational phenomenon. Prerequisite: PSYC101, Instructor's permission. Mr. de Rivera/Offered periodically

PSYC216 RESEARCH IN HEALTH PSYCHOLOGY/LABORATORY, DISCUSSION

Research in the area of health psychology addresses any issues related to health and disease in individuals and groups; analyses of doctor/patient relationships and particular diseases (acute and chronic) of interest to a student. Faculty members in the area of health psychology are also associated with the Department of Family Medicine and Community Health at UMass Medical School and the Department of Obstetrics and Gynecology at the New England Medical Center in Boston. Instructor's permission. Mr. Bibace/Offered periodically

PSYC217 RESEARCH IN THE DEVELOPMENT OF MEMORY AND LITERACY/ LABORATORY, DISCUSSION

Students participate in ongoing research projects on the development of autobiographical memory and literacy, particularly as these skills develop in social interaction with others. Prerequisites: PSYC150 and instructor's permission. Staff/Offered periodically

PSYC221 RESEARCH IN SOCIAL PSYCHOLOGY/LABORATORY, DISCUSSION

Students participate in the design, execution, analysis and interpretation of research on self-awareness and self-knowledge, including areas of emotions, attitudes and abilities. Prerequisites: PSYC105, 107, 170, and instructor's permission. Mr. Laird/Offered every year

PSYC222 RESEARCH IN COGNITIVE DEVELOPMENT/LABORATORY, DISCUSSION

Students participate in an ongoing research project in collaboration with the instructor and graduate students. Students participate in designing and conducting studies in schools and day-care centers, analyzing data and presenting findings. Recent topics include the development of early literacy, the understanding of maps and models in young children, and children's ideas about the physical world. Prerequisites: PSYC105, 107, 150, instructor's permission. Ms. Wiser/Offered periodically

PSYC223 RESEARCH IN MOTIVATIONAL AND EMOTIONAL DEVELOPMENT IN INFANTS, CHILDREN AND ADOLESCENTS/LABORATORY, DISCUSSION

Ongoing research on the effects of contexts (home, school, etc.) on the emotional and motivational development of children. Instructor's permission. Ms. Grolnick/Offered every semester

PSYC224 RESEARCH ON IDENTITY DEVELOPMENT/LABORATORY, DISCUSSION
Designed to train students in an ongoing research project on the development of subjectivity and identity in and through discourse, particularly narrative discourse. Instructor's permission required. Mr. Bamberg/Offered periodically

PSYC226 RESEARCH IN MEN'S MENTAL HEALTH

PSYC227 RESEARCH IN PSYCHOTHERAPY/LABORATORY, DISCUSSION
Studies the process of change in various forms of psychotherapy. Students can participate in the formulation of a question and systematic evaluation of hypotheses pertaining to specific client-therapist interactions. Instructor's permission required. Mr. Addis/Offered periodically

PSYC229 RESEARCH IN THE DEVELOPMENT OF LANGUAGE AND LANGUAGE SOCIALIZATION/LABORATORY, DISCUSSION
Students participate in an ongoing project concerning language development and language socialization. Students are responsible for various phases of research, including preparing literature surveys, analyzing data and interpreting results. Towards the end of the semester, students prepare a written paper describing their work. Instructor's permission. Ms. Budwig/Offered every semester

PSYC230 RESEARCH IN CULTURAL PSYCHOLOGY/LABORATORY, DISCUSSION
Provides students with an overview of the empirical research practices in different branches of cultural psychology and with practical skills in designing and carrying out one's own (or group) project. The projects are expected to continue over the following semesters. Instructor's permission required (and granted for continuing projects). Mr. Valsiner/Offered every semester

PSYC231 COUPLES RESEARCH/LABORATORY, DISCUSSION
This course involves undergraduate majors in all phases of ongoing research being conducted in the Couples Research Laboratory of professor James Cordova. Students will participate in weekly lab meetings. Depending on the phase that studies being conducted in the lab, students can be involved in project design, recruiting participants, interviewing participants, observing couples' interactions and coding their behavior, gathering data, managing data and library research. Instructor's permission. Mr. Cordova/Offered periodically

PSYC232 RESEARCH IN COMMUNITY/LABORATORY, DISCUSSION
This course provides a hands-on experience with conducting community/clinical psychology research in the area of childhood mental health. Students will be actively involved in a research project in which we will examine the relationships among race, ethnicity and mental-health issues in school children in the Worcester school district. In order to maximize the experience on this project, students will participate in a weekly class in which the theoretical underpinnings of the project are discussed. Students will also be required to write a final paper and present a poster at Academic Spree Day. Instructor's permission. Mr. Cardemil/Offered every semester

PSYC233 RESEARCH ON THINKING IN SOCIETAL CONTEXT
Students participate in ongoing interview research on the different knowledges and other resources people bring into their reasoning about complex situations, and on the manner in which people's subjectivity and their modes of thinking are shaped by their societal context and cultural history, with particular attention to gender. Students receive training in interview practices and qualitative data analysis, and conduct hands-on specific analyses of interest to them and pertaining to this research project. Weekly lab meetings, including undergraduate students, graduate students involved in the research and the instructor, are devoted to discussing the theoretical background of the research, its methodology and the students' ongoing analyses. Instructor's permission. Ms. Falmagne/Offered periodically

PSYC235 RESEARCH IN DIVERSE FAMILIES
This course involves undergraduates in all phases of ongoing research being conducted in the Diverse Families Laboratory of professor Abbie Goldberg. Current projects include the Transition to Adoptive Parenthood Project and the Lesbian Parents Project. Students will participate in weekly lab meetings. Depending on the phase that studies being conducted in the lab, students can be involved in project design, recruiting participants, transcribing participant interviews, coding data, managing data and library research. Instructor's permission. Ms. Goldberg/Offered every semester

PSYC240 PSYCHOLOGY OF NONVIOLENT PERSONAL AND SOCIAL STRUGGLE
This course considers the growing literature on personal and societal nonviolence. The first third of the course examines ideas about nonviolent communication, empathy, nonviolence in American literature, and the pragmatic investigation of historical nonviolent social struggles. This course will also consider the strategy of nonviolence, current nonviolent actions, and how nonviolent theory might be applied in contemporary struggles. Mr. de Rivera/Offered periodically

PSYC241 PHILOSOPHY OF PSYCHOLOGY/LECTURE, DISCUSSION
See Philosophy 243.

PSYC242 PSYCHOLOGICAL PERSPECTIVES ON CRIMINAL BEHAVIOR
Examines various types of criminal behavior according to psychological theories. We first will discuss major psychological theoretical perspectives on crime, including psychobiological theories, personality theories, learning theories and developmental theories. We will then discuss the intersection between various mental disorders and criminal behavior. The third part of the course will address specific types of crime, including sex offending, serial killing, terrorism and battering. The semester ends with a discussion of various legal issues related to mental health, including insanity and competency. Ms. Hines/Offered periodically

PSYC243 SEMINAR IN PHENOMENOLOGICAL PSYCHOLOGY/FIRST SEMINAR
Describes and analyzes personal experience. Each of the readings describes a different aspect of experience. These are then compared with our own experience of our body, our environment, ourselves, others, our emotions, actions and thoughts, and with our imagination and our relationship to reality. Mr. de Rivera/Offered periodically

PSYC244 COGNITIVE DEVELOPMENT/FIRST SEMINAR
This seminar explores the perceptual and cognitive abilities of babies and young children. How does their knowledge of physical objects, space, the biological world, number, and people's minds and behaviors evolve? How does their ability to imitate and communicate develop? How do they learn to categorize and label objects? How does reasoning and problem solving change with age? Different theoretical approaches will be considered, especially with respect to the role of experience, innate factors and cultural factors in development. PSYC120, 150 or instructor's permission. Ms. Wiser/Offered periodically

PSYC245 CULTURAL COMPARISONS IN PSYCHOLOGY AND ANTHROPOLOGY/ FIRST SEMINAR

Examines the logic of making comparisons between societies and persons. Brings together empirical evidence from psychology and history of culture and cultural anthropology, and provides an interpretive framework for making sense of such evidence. Different uses of knowledge about comparisons of societies within a society (in the United States or other countries) in the hands of peace- (or war-) makers, social-policy planners, etc. will be discussed. Prerequisites: some introductory geography course, PSYC101 and 156 or instructor's permission. Mr. Valsiner/Offered periodically

PSYC246 PSYCHOLOGY OF PEACEMAKING/FIRST SEMINAR

Examines the formation of social identity and how social identities may involve us in either violence or peace. Topics include psychological, psychoanalytic, sociological and political approaches to identity and the role collective identity plays in postconflict reconciliation and development. Prerequisite: PSYC176, PSTD101, ID101 or instructor's permission Mr. de Rivera/Offered annually

PSYC247 THEORETICAL MODELS OF COMMUNICATION IN PSYCHOLOGY/ FIRST SEMINAR

Provides students with systematic knowledge about the ideas of communication as these have moved between psychology, anthropology, language philosophy, sociology and cultural studies. Mr. Valsiner/ Offered periodically

PSYC249 WOMEN IN SOCIETY/FIRST SEMINAR

Examines how women's psychological functioning and development can be understood in societal context, with a central attention to differences as well as commonalities among women. To examine the workings of the societal context, we discuss anthropological and sociological studies of women's status in various societies and of different women's status within a given society and we examine how gender, race/ethnicity and class operate jointly in structuring societies and cultures. The focus of the seminar is on how economic, historical and cultural processes impinge on the individual, for example how cultural representations of femininity and masculinity, the workings of social institutions, or language as the symbolic carrier of meaning, configure social life and individual subjectivity, and we discuss the interconnections between those social and cultural processes. We center on individual women's functioning within that context, covering such topics as women's personal development, life issues of women, intellectual functioning, personal power, and women's roles and functions in society, including issues relating to role choices and adult development. The objective of the course is to guide students to approach individual functioning and development as the functioning of social agents participating in, and shaped by a complex social and cultural world. Ms. Joffe Falmagne/Offered every year

PSYC250 GENDER, FAMILIES AND CLOSE RELATIONSHIPS/FIRST SEMINAR

The primary objective of this seminar is to explore how intimate family relationships change and develop over time, and the role of gender in understanding close relationships. We will examine how popular culture and everyday family life reflect and perpetuate patterns of gender inequality. Gender relations and family life are so intertwined it is impossible to understand one without paying attention to the other. We will explore concepts such as gender, family, masculinity and femininity, to name just a few. In addition, we will examine the ways that larger social, economic and political structures shape the meanings we give to family, gender and close relationships. Seminar participants are expected to engage fully with the readings and actively participate in class discussion. Prerequisite: PSYC101 Ms. Goldberg/Offered periodically

PSYC251 LANGUAGE DEVELOPMENT/FIRST SEMINAR

A comprehensive survey of the basic issues and topics involved in the study of language development. The course begins with an examination of the structure of language and the varied uses of language in human activity. Against this background the course turns to the question of how children acquire language, with special emphasis on the contributions of cognitive, social and language-specific factors in this process. Prerequisite: PSYC150. Ms. Budwig/Offered periodically

PSYC252 LEARNING PSYCHOLOGY THROUGH TEACHING/FIRST SEMINAR

This seminar is intended for junior and senior psychology majors who have a career interest in teaching. Students in this seminar will serve as Peer Learning Assistants (PLAs) for PSYC101, where the primary tasks will include working with students and facilitating group projects. Through their participation in this seminar and their activities as PLAs for PSYC101, students will actively re-engage with basic concepts in psychology, and gain a deeper understanding of this material as well as acquire a broader perspective of the field. In addition to learning general material related to the teaching of psychology, the PLAs will receive support and guidance in their work with PSYC101. This guidance will cover a range of topics, including assisting undergraduates with writing, using Blackboard and leading class discussions. Moreover, the PLAs in this class will receive specific mentorship and guidance to assist them in leading the group projects that will be an integral part of PSYC101. Cap of about 15. Registration will be by instructor permission only. Applications may be picked up in the Psychology Department's main office or Prof. Cardemil's office.

PSYC254 GENDER DEVELOPMENT AND LANGUAGE/FIRST SEMINAR

Explores the language-gender relationship in children and adolescents, with special focus on the "social becoming" of males and females. Traditional theories of gender and language development will be explored and contrasted with discursive approaches that link gender and language to issues of self and identity formation. A practical project (observational or interview-based) will form a central piece of this course. Prerequisites: any BP/DEV/SP course (PSYC120-176) and instructor's permission. Mr. Bamberg/Offered every two years

PSYC255 EXPERIMENTAL SOCIAL PSYCHOLOGY/FIRST SEMINAR

The course will explore in some depth the contributions of experimental research to understanding various social psychological phenomena, including conformity and obedience; cognitive dissonance; self-concepts; impression formation and attribution; liking and interpersonal attraction; prejudice and stereotyping; social dilemmas; aggression; helping and altruism; and others. Each student will write a paper and lead a discussion on one such topic, which he or she will select. All students will read these papers and selected works in these topic areas. Mr. Laird/Offered periodically

PSYC256 THE PSYCHOLOGY OF COUPLES AND INTIMACY/FIRST SEMINAR

This course presents the scientific study of couples' intimate relationships. The course provides a broad overview of what is currently known about adult romantic relationships, mate selection, intimacy development, marriage, relationship distress and divorce. Mr. Cordova/ Offered periodically

PSYC257 Cognitive Science/Lecture, Discussion

See Philosophy 211.

PSYC259 Psychotherapies/First Seminar

This course provides an overview of the major theoretical approaches to conducting psychotherapy. There is a strong emphasis on diversity issues in psychotherapy throughout the course, as well as ongoing consideration regarding how therapeutic interventions can be evaluated empirically. Students are exposed to the various therapeutic approaches through primary source readings, class illustrations and discussion, videos and a final research paper. Prerequisites: PSYC101, 105, 107. Mr. Cardemil, Ms. Mansfield/Offered every other year

PSYC260 Narrative Perspective in Psychology/Capstone Seminar

Employing a proseminar format, this course examines the emergence of narrative or story construction as an increasingly influential and integrating paradigm within psychology and allied social sciences. Topics will include the conceptual foundations of the narrative perspective in a broad historical and thematic review and contemporary understandings of narrative including methods of analysis, autobiographical memory, self-narrative and identity development. Finally, students will research a topic of their own choosing in which narrative serves as a basic analytic or organizing principle. Mr. Bamberg/Offered periodically

PSYC261 Human Neuropsychology/Capstone Seminar

See Psychology 361.

PSYC262 Introduction to Idiographic Science/Capstone Seminar

Analysis of single-case based research and applications in psychology. Brings together contemporary knowledge from clinical sciences, anthropology and classic psychology, and analyzes the role of the researcher in the process of scientific investigation. Instructor's permission. Mr. Bibace, Mr. Valsiner/Offered periodically

PSYC265 Psychology of Men/Capstone Seminar

Explores topics related to the social learning and social construction of masculinity and the male gender role in different social contexts including families, friendships, mental and physical health, sports and intimate relationships. Mr. Addis/Offered periodically

PSYC268 Communicative Development/Capstone Seminar

Focuses on various approaches to an understanding of human communication from an interdisciplinary perspective. Explores the relationship between social, cognitive and linguistic factors in children's communicative development. Prerequisite: PSYC150 and a first seminar. Ms. Budwig/Offered periodically

PSYC270 Advanced Topics in Social Psychology/Capstone Seminar

An intensive treatment of selected areas in social psychological research and theory, including consistency theories in attitude formation and in interpersonal perception; attribution theory in self-perception; and social/situational determinants of normal, everyday behavior and of antisocial behaviors such as violence, criminality and riots. Ordinarily limited to senior majors in psychology or sociology. Instructor's permission. Mr. Laird/Offered periodically

PSYC272 Identity Formation/Capstone Seminar

Explores the construction of adolescent and male identities in sociohistorical contexts. Particular emphasis is placed on the sociohistorical concepts of adolescence and masculinity as discourses, and how young males between 10 and 15 years of age position themselves vis-à-vis these discourses in their own talk. Prerequisite: PSYC214 or 253. Mr. Bamberg/Offered periodically

PSYC273 Integrative Seminar in Psychology/Capstone Seminar

This course provides an opportunity for undergraduates to participate in the department's Integrative Faculty Forum. The instructor will assign readings to prepare the students for each week's forum and assist each participant to prepare a paper that determines his or her understanding of one of the central themes of the forum's discussions. Staff/Offered periodically

PSYC275 Societal Approaches to Thinking/Capstone Seminar

This capstone seminar provides a theoretical and methodological frame for studying how thinking is shaped by the societal context in which the person is situated, the social location the person occupies in that context, the cultural discourses in which he/she participates, and the nature of what is being thought about. The seminar draws from readings from interdisciplinary sources, including psychology. We start with illustrative works from developmental psychology, sociocultural psychology and social psychology that approach thinking and reasoning in their social and cultural contexts. We also examine some works that do not emphasize the social context of thinking but that examine everyday thinking about social problems. We then discuss interdisciplinary writings that emphasize how societies and cultures are structured internally in terms of gender, race and class, and we examine empirical research on thinking and on personal epistemology that is grounded in this kind of societal framework. The last class of the semester will be a symposium in which each student will present her or his final paper in a 15-minute formal presentation, followed by class discussion. Instructor's permission. Ms. Joffe Falmagne/Offered periodically

PSYC276 Advanced Topics in Cultural Psychology/Capstone Seminar

Devoted to a specific subtopic unique for each semester. Designed for seniors and graduate students. Official permission not needed, but contact the instructor for specific topic. Prerequisite: PSYC101 or COMM101. Mr. Valsiner/Offered every fall semester

PSYC277 Relating Psychology to Helping Professions Including Medicine/Capstone Seminar

Relates knowledge, skills and values relied upon by helping professions (clinicians, counselors, physicians, dentists, etc). The course will focus on the accuracy of observations that are required in helping relationships. Each student will take the role of speaker/listener and observer. Relevant information will be obtained through diverse methods such as questionnaires and interviews. All aspects of the course, including case integration, are based on a partnership between the helper and other persons. Prerequisite: PSYC101. Mr. Bibace/Offered periodically

PSYC279 Basic Developmental Theories/Capstone Seminar

Provides a systematic overview of core ideas in the selected theories and guides students to analyze these from the viewpoint of how theories relate to phenomena of development as well as empirical research practices. Instructor's permission. Mr. Valsiner/Offered periodically

PSYC280 Morality and Culture/Capstone Seminar

This course examines the development of moral reasoning and emotions from infancy through adulthood in diverse cultures. This includes a focus on key theories, methods and research findings. Readings are primarily from psychology but also from anthropology, philosophy and sociology. Prerequisites: PSYC150 and a First Seminar. Ms. Jensen/Offered periodically

PSYC282 Self and Emotion/Capstone Seminar

Focuses on the processes by which self-knowledge and self-awareness are developed and maintained. Other topics include the development of self-conceptions, self-consciousness, the understanding and control of one's own actions, self-blame, and the effects of actions on attitudes and feelings. Instructor's permission required. Mr. Laird/Offered periodically

PSYC283 Historical Background of Contemporary Psychology/Capstone Seminar
Includes an appreciation of the generative ideas and world hypotheses underlying contemporary psychological approaches and traces the earlier manifestations of these ideas and world hypotheses in intellectual history or history of ideas. Instructor's permission. Mr. Valsiner/Offered periodically

PSYC284 Research Interviewing/Capstone Seminar
Interviewing is frequently relied upon as a method for obtaining data in studies. Interviews are also an intrinsic aspect of many disciplines in the faculty of arts and sciences as well as medicine. The course will review traditions utilized by various disciplines (ethnographic; medical interviewing including history-taking in medicine; focus groups in political science and so on) and diverse specialties in psychology including clinical, developmental and industrial psychology. This course will be open to advanced undergrads and doctoral students in psychology. Instructor's permission. Mr. Bibace/Offered periodically

PSYC285 Emotion and Interpersonal Relationships/Capstone Seminar
What are emotions and how do they affect our behavior and our relationships? The course examines a number of theories. Prerequisite: First Seminar and instructor's permission. Mr. de Rivera/Offered every other year

PSYC286 Infancy/Capstone Seminar
This course will focus on the perceptual, motor, emotional and cognitive development of children during the first three years of life. It will include some of the following topics: object and event perception, development of self, imitation, speech and language development, categorization, knowledge about people and the physical and biological worlds, play, memory, and the role of innate factors, family environment and cultural factors in these developments. Ms. Wiser/Offered periodically

PSYC290 Motivation and Self-Regulation/Capstone Seminar
Explores the motivation of human behavior (i.e., what energizes and directs our actions). Examines theoretical and empirical works relevant to motivation, particularly those emphasizing an active organism. Also applies motivational theories to various areas, including education, work, sports, psychopathology and psychotherapy. Prerequisite: First Seminar. Ms. Grolnick/Offered periodically

PSYC292 Capstone Research in Psychology/Tutorial
Independent study at an advanced level for qualified students. Staff/Offered every semester

PSYC295 Advanced Topics on Gender and Society/Capstone Seminar
This capstone seminar examines selected issues in the study of gender in its societal matrix, where gender is understood in its intersection with race, class and ethnicity. The seminar draws from interdisciplinary resources and systematically guides students into scholarly research on specific topics in these areas. Along with class readings and discussions on issues of theory and methodology, students will select a topic of their choice to research in-depth and discuss their findings with the class weekly. The course is suitable for psychology seniors and students from other disciplines or programs who wish to pursue psychological questions in this area. Prerequisites: Instructor's permission. Ms. Falmagne/Offered periodically

PSYC296 What Children Know/Capstone Seminar
Examines the evolution of children's knowledge about the physical world; the biological world; language, number and other symbolic systems; and the social world. How do infants' and children's perceptual and cognitive abilities interact with input from caretakers to advance their knowledge? How do symbolic systems such as language and writing get internalized? Related topics are the evolution of language in the human species, the history of number and writing systems and animal cognition. Prerequisites: PSYC120 or 150 and a First Seminar. Ms. Wiser/Offered periodically

PSYC297 Honors in Psychology: Junior and Senior Year/Tutorial
The first year of a two-year psychology honors sequence is designed to guide selected honors students through preparation for, design of, and execution of an independent honors research project. The psychology honors sequence is designed to be especially, but not uniquely, attractive to students interested in pursuing graduate study in psychology or another related discipline such as medicine, teaching and the law. In the junior honors year, the focus of the class will be to: 1) provide students with an overview of the historical background and philosophical underpinnings of the major schools of psychology; 2) provide an overview of the various content areas of psychology and assist students in preparing for graduate study; 3) provide students with practice in both written and oral communication about various theoretical and research issues in psychology; and 4) provide an honors-level introduction to the design and analysis of students' individual research projects. Senior honors is the second year of the two-year psychology honors sequence. The major focus of the year will be the completion of individual research projects. Class meetings will involve discussions of research interests of the students, issues of design and methodology, careers in psychology, and information regarding graduate training in psychology. In the spring semester, students will complete their individual research projects and prepare written and oral presentations. Honors students will present their projects at a departmental honors fair. Mr. Cordova/Offered every semester

PSYC298 Internship
Staff/Offered every semester

PSYC299 Directed Study in Psychology
Independent study for qualified students. Instructor's permission. Staff/Offered every semester

PSYC300 Developmental Psychology Forum/Graduate Seminar
Devoted to the presentation and critique of different approaches to the individual and his or her ways of functioning in the world. The approaches considered may include: Piagetian, nativist, feminist or cultural/historical approaches, or may stem from interdisciplinary perspectives on a selected theme. The aim is to acquaint the participants with sympathetic expositions of several points of view and the application of these viewpoints to some selected topic of inquiry. Different topics are discussed in different years. Mr. Bamberg, Ms. Budwig, Ms. Falmagne, Mr. Valsiner, Ms. Vinden, Ms. Wiser, and others/Offered every year

PSYC301 Problem, Theory and Method/Graduate Seminar
During the first semester, each faculty member meets once with the class to discuss his or her perspectives and research. Students prepare brief reports characterizing the links among each faculty member's perspective, research, problems and methods. During semester two, students formulate proposals, and the methods and ethics of research are discussed. Ms. Wiser/Offered every semester

PSYC302 STATISTICAL METHODS/GRADUATE SEMINAR

The first semester is devoted to a review of the basic concepts of statistics, such as probability, statistical inference, sampling distribution, t-test and regression, and to nonparametric statistics. The second semester introduces analysis of variance and experimental design. Ms. Wiser/Offered every year

PSYC303 ADULT ASSESSMENT/GRADUATE CLINICAL SEMINAR

Introduces measurement in clinical psychology (first semester) and intellectual and projective testing with adults (second semester). Ms. Crider/Offered every year

PSYC304 CHILD ASSESSMENT/GRADUATE CLINICAL SEMINAR

Focuses on the administration and interpretation of various assessment instruments for children. Includes intelligence and personality testing and diagnostic interviewing. Mr. Ciottone, Ms. Grolnick/Offered every year

PSYC305 PSYCHOLOGY OF CONFLICT AND CULTURES OF PEACE/ GRADUATE SEMINAR

This course begins with an examination of the literature on intergroup conflict and reconciliation, moves to a consideration of cultures of peace, and concludes by studying a model of societal dynamics and social change that describes how individual action and collectively held emotions influence the development of institutions and communities that promote a culture of peace. Mr. de Rivera/Offered periodically

PSYC306 QUALITATIVE/INTERPRETIVE METHODS/GRADUATE SEMINAR

A graduate-level introductory seminar into qualitative research, its conceptual roots, covering the ontological and epistemological concerns, but centering on the methodological issues surrounding contemporary psychological research. Textbook readings will be supplemented with contemporary articles on ethnography, ethnomethodology, discourse and narrative analysis. Mr. Bamberg/Offered periodically

PSYC308 SOCIAL, EVOLUTIONARY, CULTURAL FORUM/GRADUATE SEMINAR

This is a forum on research and theory in social, evolutionary and cultural psychology in which SEC members discuss theoretical and methodological problems, plan new research and share updates on ongoing projects. The SEC forum is also the home of the E-motion Project which explores computer projected minimal social phenomena such as the Heider Films. Mr. de Rivera, Mr. Laird, Mr. Valsiner/ Offered periodically

PSYC310 THEORIES OF PSYCHOTHERAPY/GRADUATE SEMINAR

This course provides an overview of the major theoretical approaches to conducting psychotherapy. There is a strong emphasis on diversity issues in psychotherapy throughout the course, as well as ongoing consideration regarding how therapeutic interventions can be evaluated empirically. Mr. Cardemil/Offered every other year

PSYC311 PSYCHOPATHOLOGY/GRADUATE SEMINAR

Examines the difficulties of defining psychopathology and reviews the major diagnostic categories currently in use from a phenomenological, theoretical and research perspective. Special attention is given to gender, class and diversity issues. Staff/Offered every other year

PSYC312 CHILD PSYCHOPATHOLOGY IN CONTEXT/GRADUATE SEMINAR

In this course, we will approach child and adolescent psychopathology with special attention to how difficulties in adjustment and mental health develop over time. We will pay special attention to the risk and protective factors associated with various problems of living and problems of adjustment. In addition, we will take a contextual or ecological approach to developmental psychopathology – that is, we will consider the relevant contexts in which the problem develops and in which intervention or treatment should be pursued (e.g., families, schools, neighborhoods). In turn, we will discuss the utility and effectiveness of various treatments and interventions including individual therapy, group therapy, family approaches, and within-school prevention and intervention. Ms. Goldberg/Offered periodically

PSYC315 SOCIAL AND CULTURAL PSYCHOLOGY OF GENOCIDES/ GRADUATE SEMINAR

This is a basic graduate seminar on the socially relevant topic of how human beings can be brought to act violently against other human beings in specific socially defined contexts. We look at contexts specifiable as genocides and analyze the various ideologically oriented efforts to apply (or not apply) that term to specific situations. The place where genocides happen may vary—these occur in any country, community, or even small group. This seminar belongs to the thematic field of cultural psychology of political actions. Such psychology cannot be advanced from any political standpoint, but needs to be constructed on a metapolitical basis. Mr. Valsiner/Offered periodically

PSYC316 SENSORY PROCESSES AND PSYCHOPHYSICS/GRADUATE SEMINAR

Discusses psychophysical concepts and methods, including magnitude estimation and multidimensional scaling. Focuses on concepts and methods relevant to studies of taste, smell and flavor. Staff/Offered periodically

PSYC317 MORAL DEVELOPMENT/GRADUATE SEMINAR

Attempts to integrate the literatures on moral development and prosocial behavior. Four problems are considered: (1) the relationship between justice and caring; (2) the social development of empathy and responsibility and the personal development of a moral identity; (3) the tension between the search for moral universality and the fact of cultural differences; (4) and the relationship between abstract moral reasoning and concrete moral action. Mr. de Rivera/Offered periodically

PSYC318 SYMBOLIC DEVELOPMENT IN CHILDREN AND HISTORY/ GRADUATE SEMINAR

This course will be of interest to students interested in child development, cognition and the history of human knowledge. The topic, early symbolism (in the historical as well as ontogenetic sense), has both a rich history at Clark University and a contemporary relevance in cognitive psychology. We will study some of the following areas: the developments of writing, symbolic verbal communication and number in children and in history; magic and myths; symbolization in alchemy and modern science; children's understanding of models, graphs and maps; and various aspects of mental representation in cognitive psychology. Ms. Wiser/Offered periodically

PSYC319 ADVANCED TOPICS IN SOCIAL PSYCHOLOGY/CAPSTONE SEMINAR

See Psychology 270.

PSYC320 ADVANCED TOPICS IN COMMUNICATION/GRADUATE SEMINAR

Provides an overview of theory and research in the area of language development with special focus on functional approaches. Topics vary from year to year. Ms. Budwig/Offered periodically

PSYC321 TOPICS IN DISCOURSE ANALYSIS/GRADUATE SEMINAR

Advanced graduate seminar in qualitative methods: explores the basic question of how meaning is situated in discourse, especially narrative discourse, and how we can get hold of it by methods of analysis. The course then applies some of these issues to ongoing research projects. Mr. Bamberg/Offered periodically

PSYC323 THEORY AND RESEARCH IN SOCIAL AND EMOTIONAL DEVELOPMENT/GRADUATE SEMINAR

Explores theories and research on the socialization and individuation (and their interaction) of the developing infant, child and adolescent. Highlights contributions of the child, family, the larger sociocultural context and their interplay. Topics covered include parent-child attachment, temperament, peer relations, self-development and sex-role socialization. Emphasizes research methods and analysis in developmental research (e.g., modeling growth and change). Ms. Grolnick/Offered periodically

PSYC325 CONCEPTS AND THEORIES IN CONCEPTUAL DEVELOPMENT/GRADUATE SEMINAR

Examines the development of children's knowledge about the physical, biological and social worlds from a cognitivist perspective. Topics include the structure and content of infants' knowledge, processes of knowledge acquisition, relations between individual and cultural knowledge. Related topics include: evolutionary perspectives on knowledge development, concept theory change in history of science, and conceptual change in science and math classrooms. Prerequisite: permission of instructor. Ms. Wiser/Offered periodically

PSYC326 FEMINIST PERSPECTIVES ON SELF, MIND, IDENTITY AND DEVELOPMENT/GRADUATE SEMINAR

In this seminar, we survey several strands of feminist scholarship that address how mind, self and identity are constituted and develop in societal context. A central tenet is that gender, as a social formation intersecting with others, such as race and class, structures the social and cultural order both discursively and materially; psychological functioning and development are considered within that systemic framework. Feminist theories vary in particular in how they address the role of practice, discourse, social power relations and individual agency in the development of self, mind and identity; how they address the intersectional nature of social locations; and how they address the postmodern issues regarding the notion of a bounded, unified self. The seminar covers contrasting perspectives on these issues. Readings are structured so as to ground psychological theory and research within interdisciplinary analyses of societal processes. The aim of the seminar is to provide theoretical and methodological resources applicable toward conducting feminist research on mind, self and identity with a psychological grain of analysis, grounded in a broad societal frame of interpretation. Instructor's permission. Ms. Falmagne/Offered periodically

PSYC327 BASIC DEVELOPMENTAL THEORIES/GRADUATE SEMINAR

Provides a systematic overview of core ideas in the selected theories of development. Covered will be theories of Lamarck, Preyer, J.M. Baldwin, Piaget, Vygotsky, Werner, Kaplan, Gottlieb, Fischer and van Geert. Analyzes theoretical systems from the viewpoint of how these theories relate to the phenomena of development, as well as with empirical research practices. Mr. Valsiner/Offered periodically

PSYC328 ADVANCED TOPICS IN COGNITIVE DEVELOPMENT/GRADUATE SEMINAR

Reviews recent advances in different areas of cognitive development from a variety of theoretical perspectives. Topics may include various neonativist approaches to language and knowledge development; connectionism; dynamic systems theory; situated cognition; distributed cognition; constructivism; and sociocultural approaches to learning. Ms. Wiser/Offered periodically

PSYC331 MULTIVARIATE ANALYSIS/GRADUATE SEMINAR

Introduces students to multivariate statistics. The models, assumptions, data screening and interpretation of results for factor analysis, multiple regression and multidimensional scaling, for example, are discussed. Staff/Offered periodically

PSYC332 COGNITION AND DEVELOPMENT/GRADUATE SEMINAR

An hour-long discussion about various issues in cognitive development studied from a broad range of perspectives. Topics in past years have included: pretense, nature of symbolic thinking, situated cognition approaches to literacy, socioconstructivist theory of language development, the relation between emotions and the self, and activity theory. Each semester is divided into reading major works in development (e.g., Vygotsky, Dewey) and recent experimental papers closely related to each participant's research. This is a yearlong course for which students receive a one semester of credit. Ms. Wiser, Ms. Budwig/Offered periodically

PSYC334 CRITICAL PSYCHOLOGY FORUM/GRADUATE SEMINAR

This is an interdisciplinary forum for bringing issues of contemporary social, personality, evolutionary and cultural psychology to be actively discussed by all graduate students. The aim is to acquaint the participants with several opposing views and to demonstrate how such views can lead to new knowledge. Different topics are discussed in different years. Staff/Offered periodically

PSYC336 COGNITIVE AND AFFECTIVE BEHAVIOR/GRADUATE SEMINAR

This course is firmly research-based but goes beyond the recounting of research to examine the specific pertinence of different findings for understanding normal and atypical child development. Cognitive development research is a major area of developmental psychology that investigates the acquisition of knowledge in children. It describes and explains systematic changes in children's knowledge about the physical and the social worlds and in their use of cultural tools (e.g., language, writing, and number). Cognition involves a large array of mental processes – perceiving objects and events, problem-solving, reasoning, creativity, using language, conceptualizing, remembering, classifying, symbolizing, understanding others' intentions, and many others. Ms. Wiser/Offered periodically

PSYC337 EMERGING ADULTHOOD: DEVELOPMENT FROM LATE TEENS THROUGH THE TWENTIES

This course focuses on development from ages 18 to 29, a period of the life course now known as "emerging adulthood." Topics explored include family relationships, friendships, love and sexuality, school and work transitions, religious beliefs, and views of what it means to become an adult. The course is international in scope, highlighting differences between industrialized and developing countries. Perspectives from psychology, sociology and anthropology are considered. Mr. Arnett/Offered periodically

PSYC347 LANGUAGE AND HUMAN DEVELOPMENT/GRADUATE SEMINAR

Introduces students to central debates concerning the relationship between language, thought and culture. Drawing upon readings from a variety of disciplines including psychology, anthropology and linguistics, we consider language and context, communicative practices, and how developmental psychologists have thought about the interface between language, thought and culture. Students have the opportunity to relate ongoing interests to themes from the seminar. Ms. Budwig/Offered periodically

PSYC351 METHODOLOGIES OF SYSTEMIC ANALYSES OF SINGLE CASES/ GRADUATE SEMINAR
The goal is to provide graduate students with knowledge and practical experience of analysis of individual cases (both for research and practice). The seminar covers both qualitative and quantitative approaches to single-case analysis. Mr. Valsiner, Mr. Laird/Offered periodically

PSYC355 EMOTION AND INTERPERSONAL RELATIONSHIPS/CAPSTONE SEMINAR
See Psychology 285.

PSYC356 INFANCY/CAPSTONE SEMINAR
See Psychology 286.

PSYC361 HUMAN NEUROPSYCHOLOGY/CAPSTONE SEMINAR
This course provides a broad overview of neuropsychology for undergraduate and graduate students. The goal of the course is to provide students with knowledge of brain and behavior relationships. Students will learn how the brain governs primary cognitive domains such as memory, attention, executive functions and intelligence. We will also examine the neuropsychological tests used to evaluate the various cognitive domains. Students will become familiar with the format and type of information provided in neuropsychological reports, and we will discuss some of the disorders typically seen in individuals referred for neuropsychological evaluations such as dementias, traumatic brain injury, learning disabilities, ADHD etc. Mr. Cirillo/Offered periodically

PSYC362 CURRENT PERSPECTIVES IN EVOLUTIONARY AND SOCIAL PSYCHOLOGY/GRADUATE SEMINAR
Evolutionary theory is both challenged by and contributes to the understanding of social phenomena. The course explores classic topics in social interaction, such as group process, conformity and obedience, interpersonal attraction, emotion, self and identity, and altruism, bringing to bear simultaneously the perspectives of evolutionary psychology and standard social psychology. Mr. Laird/Offered periodically

PSYC364 SEMINAR: DIVERSITY ISSUES/GRADUATE SEMINAR
This course examines the sociocultural context of human behavior with a particular focus on issues of diversity in the clinical setting. This course fulfills the Massachusetts State Licensing Board requirement for training in issues of cultural diversity. Mr. Cardemil/Offered every other year

PSYC365 PSYCHOLOGY OF MEN/CAPSTONE SEMINAR
See Psychology 265.

PSYC366 RELATING PSYCHOLOGY TO HELPING PROFESSIONS INCLUDING MEDICINE/CAPSTONE SEMINAR
See Psychology 277.

PSYC368 COMMUNICATIVE DEVELOPMENT/CAPSTONE SEMINAR
See Psychology 268.

PSYC369 INTRODUCTION TO IDIOGRAPHIC SCIENCE/CAPSTONE SEMINAR
See Psychology 262.

PSYC370 NARRATIVE PERSPECTIVE IN PSYCHOLOGY/CAPSTONE SEMINAR
See Psychology 260.

PSYC372 IDENTITY FORMATION/CAPSTONE SEMINAR
See Psychology 272.

PSYC374 COUPLES THERAPY PRACTICUM/GRADUATE SEMINAR
Students in this practicum will learn how to assess and treat the full spectrum of mildly to severely distressed couples. The treatment approach emphasizes fostering intimacy, closeness and mutual acceptance, while at the same time teaching useful communication and problem-solving skills. We will be treating both married and unmarried couples as long as they are currently living together and are not violent. Depending on the number of students in the practicum, students will either treat couples as part of a two-person team or as the sole therapist. Class time will be devoted to group supervision, discussions of the broader issues of couple therapy and a weekly journal club. Students should expect to see between two and three couples over the course of the one-year practicum, with each course of therapy being approximately 20 to 25 sessions. Students in the practicum will learn about the correlates and predictors of marital distress, how to assess a couple's level of distress and commitment, how to formulate and test therapeutic hypotheses over the course of treatment, and how to conduct a very powerful and effective approach to couple therapy. Students should expect to be proficient and capable of proceeding quite independently by the end of this one year practicum. Mr. Cordova/Offered periodically

PSYC375 SOCIETAL APPROACHES TO THINKING/CAPSTONE SEMINAR
See Psychology 275.

PSYC376 ADVANCED TOPICS IN CULTURAL PSYCHOLOGY/CAPSTONE SEMINAR
See Psychology 276.

PSYC379 BASIC DEVELOPMENTAL THEORIES/CAPSTONE SEMINAR
See Psychology 279.

PSYC380 PSYCHOTHERAPY PRACTICUM/GRADUATE CLINICAL PRACTICUM
Supervised experiences in psychotherapy. Staff/Offered every semester

PSYC382 ADVANCED THERAPY PRACTICUM/GRADUATE CLINICAL PRACTICUM
Staff/Offered periodically

PSYC383 MORALITY AND CULTURE/CAPSTONE SEMINAR
See Psychology 280.

PSYC384 CULTURE AND HUMAN DEVELOPMENT
This course examines the ways an individual's psychological and social development takes place in cultural context. The course focuses on childhood through early adulthood, and addresses what constitutes normative development in different cultures. Readings are both qualitative and quantitative. While most of the readings are drawn from psychology, some readings are by writers in fields such as anthropology and philosophy. Course content has implications for theoretical and applied purposes. Ms. Jensen/Offered periodically

PSYC385 CHILD THERAPY PRACTICUM/GRADUATE CLINICAL PRACTICUM
Ms. Grolnick, Mr. Ciottone/Offered every other year

PSYC387 ETHICS IN CLINICAL PSYCHOLOGY/GRADUATE CLINICAL PRACTICUM
For first-year clinical students. Ms. Goldberg/Offered every year

PSYC389 CLINICAL WORKSHOP/GRADUATE CLINICAL SEMINAR
For all clinical students in residence. Clinical Staff/Offered every semester

PSYC390 PROGRESS IN PSYCHOLOGY/GRADUATE SEMINAR
This seminar will acquaint advanced graduate students with the most recent theoretical, empirical and methodological thought in the discipline. Staff/Offered every semester

PSYC391 MASTER'S SEMINAR/GRADUATE SEMINAR
Provides advanced graduate students with a systematic framework for knowledge about professionally relevant accomplishments in their professions: second-year project, M.A. thesis, preparation of manuscripts for publication, build-up of curriculae vitae. Staff/Offered every semester

PSYC392 Self and Emotion/Capstone Seminar
See Psychology 282.

PSYC393 Historical Background of Contemporary Psychology/ Capstone Seminar
See Psychology 283.

PSYC394 Research Interviewing/Capstone Seminar
See Psychology 284.

PSYC395 Advanced Topics on Gender and Society/Capstone Seminar
See Psychology 295.

PSYC396 What Children Know/Capstone Seminar
See Psychology 296.

PSYC397 Internship in Developmental Psychology
This course allows advanced graduate students in the developmental program the opportunity to fulfill some of the requirements of their graduate education through an internship experience external to the university. Instances of suitable internships include an internship in college teaching; a research internship; or a practicum related to their area of scholarship. Permission of the director of developmental training is required. Staff/Offered every semester

PSYC398 Clinical Internship
This course allows graduate students in the clinical psychology training program who are completing their APA approved internship. Permission of the director of clinical training is required. Staff/Offered every semester

PSYC399 Directed Study
Prerequisite: permission of instructor. Variable credit. Staff/Offered every semester

SOCIOLOGY

Program Faculty

Deborah Merrill, Ph.D. - *Chair*
Parminder Bhachu, Ph.D.
Patricia Ewick, Ph.D.
Eric Gordy, Ph.D.
Bruce London, Ph.D.
Robert Ross, Ph.D.
Shelly Tenenbaum, Ph.D.

Program Overview

The American sociologist C. Wright Mills described the perspective of sociology as the "sociological imagination." This point of view enables us to see how individual lives are shaped by larger social forces. Mills argued that we cannot fully understand ourselves without understanding the society in which we live. At Clark, the sociology faculty is committed to developing such an analytic capacity in students.

Through the examination of social processes, such as social stratification, social movements and social change, and through an investigation of diverse social institutions, such as the law, family, medicine and religion, students acquire the conceptual and analytical tools to enhance both their understanding of their own lives and the world in which they live.

One of the questions most frequently asked by students is, "What can I do with a degree in sociology?" Because of the emphasis placed on critical thinking, analytical and communicative skills, and methodological training, students majoring in sociology are well equipped to enter a variety of occupations, as well as professional careers and graduate schools. Sociology majors have gone to law school, medical school, social-work and business school. Others have become marketing analysts, government policy analysts, university administrators and political consultants.

Undergraduate Requirements

The sociology major consists of 10 courses within the department and a minor, concentration, or program in the social sciences or closely related field. The 10 departmental courses are to be distributed as follows:

All majors must complete:

- SOC010 Introduction to Sociology
- SOC105 The Social Research Process
- SOC107 Classical Sociological Theory
- SOC200 Class, Status and Power
- SOC105 The Social Research Process and SOC107 Classical Sociological Theory prior to their senior year. SOC107 is a prerequisite for SOC200 Class, Status and Power. Students who complete an equivalent methods course in psychology, geography or government may waive the SOC105 requirement and count this methods course toward their sociology major (i.e., one of 10 courses required for major.)
- Six additional sociology credits, one of which must be a capstone. At least three of these six courses must be at the 200 level. These credits may be fulfilled through the completion of six regular courses or through a combination of course work, internships (maximum of two credits) or directed research. Of the four required courses for a major, three must be taken on campus. Of the 10 total courses for the major, six must be taken on campus. COPACE courses are not counted for sociology credit. To receive sociology major credit, students must earn a grade of C– or better.

The Capstone Requirement

Sociology majors must take a capstone seminar. To enroll in a capstone seminar, students must have already completed SOC010 Introduction to Sociology, SOC105 Social Research Process, SOC107 Classical Sociological Theory and all course prerequisites in the subject area of your capstone seminar. The capstone seminar will build upon knowledge gained in previous courses and will include a serious research component. All courses between 270 and 296 are capstone seminars. SOC298 Senior Honors Thesis also fulfills the capstone requirement.

Honors Program

Senior Honors Thesis: Selected seniors may wish to complete an honors thesis. This is usually the equivalent of two full courses in sociology. To prepare for the thesis, students will be encouraged to do a directed reading or research in the fall of their senior year. Students who select this option are expected to devote approximately 50 percent of their senior year to major research. Application to the Sociology Department by those with a 3.2 average in the major must be made by March 1 of the junior year. Only students whose proposal is approved may waive the capstone seminar requirements. Complete guidelines are in the Sociology Student Handbook, which is available in the department office or online.

Sociology Minor

Requirements for a sociology minor consist of six courses with the following provisions:

Three of our four core courses:

- SOC010 Introduction to Sociology
- SOC105 The Social Research Process
- SOC107 Classical Sociological Theory
- SOC200 Class, Status and Power.

Please note that SOC107 is a prerequisite for SOC200. Students who have completed an equivalent methods course are encouraged to take the remaining three core courses. Three additional sociology courses, at least two of which must be at the 200 level. Four of the six courses must be taken on campus. Students must earn a grade of C– or better to receive sociology credit.

Courses

SOC010 Introduction to Sociology/Variable Format

Overview of sociology, its areas of study, methods of inquiry and concepts for the analysis of society. Fulfills introductory course required for majors. Ms. Ewick, Ms. Tenenbaum, Mr. London/Offered every semester

SOC090 No Sweat! The New Sweatshops in Global Context

Low wages, long hours and dangerous conditions characterized work in-turn-of-the-century sweatshops – especially the garment industry. These conditions are back, characterizing up to half the U.S. apparel industry and are typical in the global rag trade as well. This seminar will explore the new sweatshops, and what we can do about the problem. The course will develop student skills in using the Internet as a serious research tool to supplement but not replace libraries. Fulfills the Global Comparative Perspective. Mr. Ross/Offered periodically

SOC105 Social Research Process/Lecture, Discussion

General introduction to logic, techniques and ethics of social-science inquiry. Reviews qualitative and quantitative methods, as well as sampling. Fulfills the methods requirement for majors. Not open to seniors. Ms. Ewick, Ms. Merrill, Staff/Offered every semester

SOC107 Classical Sociological Theory/Variable Format

A critical and comparative survey of the major theorists of early sociology. The course is centered around the "canonical" core of sociological theory as represented by selected works of Marx, Durkheim and Weber. In addition, some contemporary perspectives are explored. These more contemporary perspectives may include critical theory, psychoanalytic theory, symbolic interactionism and standpoint theories. Emphasis is placed on differing concepts of social structure, social and historical change and the meaning of social action. Fulfills the social-theory requirement for majors. Mr. Gordy/Offered every semester

SOC110 Sociology of Gender/Lecture, Discussion

Focusing on sociological, historical, psychological and economic dimensions of gender, this course examines the ways in which the social system and its institutions create, maintain and reproduce gender. The course emphasizes the processes through which gender categories are constructed and represented, as well as the consequences of these categories for the lives of individuals. Ms. Ewick/Offered periodically

SOC125 Cities and Suburbs/Variable Format

Introduces urban sociology. Examines the historical structure and development of American metropolitan areas and community power, with special attention to changing functions of cities and suburbs. Examines different ways of life in cities and suburbs. Globalization and international comparative perspectives are also examined. Mr. Ross/Offered every year

SOC130 Genocide

Provides students with a comparative perspective that highlights theory and concrete examples of genocide. The course will begin with an overview of structural, cultural, psychological and political conditions that make the occurrence of and experience of genocidal behavior more probable. After surveying sociological theories of genocide, we will explore four cases of genocide that took place over the course of centuries and across several continents. The course will end with discussion of the prevention of genocide. Ms. Tenenbaum/Offered every year

SOC135 Media and Society/Lecture, Discussion

Analyzes the development, history and structure of media of mass communication. Examines research on a variety of contemporary issues in the sociology of media. A variety of theoretical and methodological approaches is presented to questions of analysis and effects of communication media. Mr. Gordy/Offered occasionally

SOC136 Effects of Mass Media

This course offers an overview of the history of effects research, contemporary issues in media effects, and considers future directions for research. It is a prerequisite for the media effects workshop.

SOC137 Race and Ethnicity Across Borders: Comparing the Local and Global/First-Year Seminar

Using a comparative framework, this seminar will examine the concepts of race and ethnicity in local, national and global locations. Particular emphasis will be on race and ethnicity in changing cultural and political contexts in an ever-changing globally connected world. For example, how have the events of September 11 in New York determined and constructed racial and ethnic identities? What are social, cultural and political dynamics that shape racial identities and ethnic stereotypes? Why do derogatory racial labels get attached to people? How do ethnic groups get defined in volatile contexts? Students will read autobiographies and biographies to explore how formative racial and ethnic experiences have shaped their own lives and identities and those of others who have documented their lives in books and on film. What can we learn from these racial and ethnic imaginations that can help us theorize race and ethnicity across borders through sophisticated and sensitive theoretical frameworks. Fulfills the Global Comparative Perspective. Ms. Bhachu

SOC160 Global Cultures and Identities/Lecture, Discussion

Explores the impact of local, national and international forces in the formation of cultural identities at a time of rapid social changes. Focuses on contemporary cultures to examine local and national identities as they are globally determined. Emphasizes the elastic and the plastic nature of cultures and the importance of time, place and space to understand the emergence of new culturally diverse settings. Examines the nature of social and cultural change in local, national and global economic and political spaces. Ms. Bhachu/Offered every year

SOC175 The Sociology of Families/Lecture, Discussion
Examines the assumed decline of "the" American family and the recent changes in family formations. Also considers challenges to the new family, such as dual-career couples and the resulting division of labor in the home as well as divorce. Working-class, African American and homeless families are also discussed. Ms. Merrill/Offered every year

SOC180 Aging and Society/Lecture, Discussion
This course challenges stereotypes about the elderly and aging as a "problem" for society. Focuses on the diversity of the aged and the experience of aging in the United States. Ms. Merrill/Offered every other year

SOC200 Class, Status and Power/Variable Format
Analyzes the nature, dynamics and historical development of social inequality. The economic and political power of the upper class, social mobility, the process of deindustrialization, feminization of poverty and the intersection of race and class are studied. Required for the major. SOC107 is a prerequisite. Mr. London, Mr. Ross, Ms. Tenenbaum/ Offered every semester

SOC203 American Jewish Life/Variable Format
Introduction to the social scientific study of American Jewry. Topics include immigration, economic mobility, intermarriage, Jewish feminism, American Judaism, ethnic identity, anti-Semitism and political behavior. Throughout the semester, comparisons between Jews and other groups are highlighted. Ms. Tenenbaum/Offered every other year

SOC205 Sociology of the Environment/Lecture, Discussion
Introduction to environmental sociology, a newly emerging area of interest. Focuses on the reciprocal relationships between society and the environment. The theoretical perspectives of human ecology and political economy are used to illuminate topics such as population, technology and environmental degradation, the environmental movement, north-south environmental conflicts, and food and hunger. Mr. London/Offered every year

SOC218 Work and Play in the City: Then and Now
See History 218.

SOC225 Religion and Society/Lecture, Discussion
This course introduces students to key theoretical and empirical works in the sociology of religion. We apply major theoretical perspectives to contemporary religious life. We ask how individuals find meaning in and are shaped by their experiences of religion. Special consideration is given to how gender, race and ethnicity influence religious life. We explore the rise of new religious movements (historical and contemporary), the relationship between religion and modernity, and elements of fundamentalism and conservatism in Christianity and Judaism. Staff/Offered periodically

SOC231 Meaning, Politics and Difference: Sociology of Culture/ Lecture, Discussion
This course applies several of the principal concepts, frameworks and theoretical approaches currently used in the sociology of culture and samples some of the major contemporary research in the field. The goal is to offer a range of approaches by which sociologists can examine and understand cultural forms and cultural phenomena. Readings focus on relations between culture and history, culture and power, culture and politics, culture and resistance, and culture and local environments. The course is intended to engage contemporary debates in culture, rather than to offer a conclusive and synthetic definition of the field. SOC010 or COMM101 is a prerequisite. Open to juniors and seniors only. Mr. Gordy/Offered every other year

SOC232 Population, Environment and Development/Variable Format
Studies the statistical description and analysis of human populations. Focuses on relationships between and among social, cultural, political and economic forces; and population structures, processes and characteristics. Such demographic factors contribute to the understanding of social issues, such as the aging of the population, the changing status of women, rapid world urbanization and Third World economic problems. Mr. London/Offered every year

SOC233 Hatred
This course is designed to explore causes and dynamics of racism and ethnonational violence in the United States and elsewhere in the world. We will look intensively at a few empirical cases, and examine individual pieces of research from several others. The course will explore theoretical perspectives that attempt to account for ethnonational violence in terms of psychological phenomena, and also perspectives that attempt to explain this type of violence in terms of the motivations of states and institutions. In the final weeks of the semester, we will examine some of the strategies that are available to respond to ethnonational violence, with an emphasis on efforts at denial, initiatives for justice and strategies of prevention. Mr. Gordy/ Offered periodically

SOC241 Sociology of Medicine/Lecture, Discussion
Examines the role of health-care professionals in the United States, as well as health and illness as social phenomena. The course also addresses problems in the health-care system at the national level and reviews potential solutions to the mounting crisis in the provision of health services. Not open to first-year students. Ms. Merrill/Offered every year

SOC242 Human Rights and Transitional Justice/Lecture, Discussion
This course will explore the development of international law in relation to violations of human rights from the signing of the Hague and Geneva conventions to the present. The course will explore what approaches have been tried, the advantages and drawbacks of each, and the recurring dilemma faced by transitional regimes of whether to "trade justice for truth." The principal examples will be: the International Military Tribunals at Nuremberg and Tokyo; the investigative commissions appointed by South Africa, Argentina and Chile; the International Criminal Tribunals for the former Yugoslavia and Rwanda; and the ongoing debate over the founding of the International Criminal Court. Mr. Gordy/Offered periodically

SOC243 Political Sociology/Variable format
Examines various dimensions of political power in societies. Considers various definitions of power and the state. Empirical studies focus on political communities and political inequalities; states, bureaucracies and "pressure"; political culture and communication; and revolution. Emphasizes historical, comparative and international dimensions. Mr. Gordy, Mr. Ross/Offered periodically

SOC244 The Community/Lecture, Discussion
An analysis of one of the most enduring ideas at the heart of the discipline of sociology: the idea of community. How do we define "community"? What is the meaning of community for individuals and groups? How has the nature of community changed over time? And what are the central concepts, issues, theories and methods used by sociologists in the writing of community studies? Mr. London/Offered periodically

SOC249 The Sociology of Development and Underdevelopment/ Lecture, Discussion

Examines and analyzes the transformation of postcolonial, Third World societies undergoing capitalist or socialist development. The course discusses theories of development in a social, economic and demographic context. It also explores the international division of labor, urbanization and basic needs provision. Mr. London, Staff/Offered periodically

SOC250 Culture, Consumption and Class in Local and Global Contexts/Lecture, Discussion

Focuses on political, cultural and ethnic aspects of consumption. Emphasizes how people and groups define themselves through symbols in consumer products. Examines the interplay between economic markets and cultural identities, local and global processes, and consumption and cultural strategies to discover the consumer subcultures. Students conduct a small ethnographic project on consumer pattern, product or culture. Ms. Bhachu/Offered every other year

SOC252 Race and American Society/Lecture, Discussion

Focuses on the political, economic and social lives of Native Americans, Latinos, African Americans, Asian Americans and whites. Topics include social construction of race, racism, the civil-rights movement, gender, class, popular culture and public policies. A central assumption of this course is that we must turn to the historical experience to understand contemporary race relations. Ms. Tenenbaum/ Offered every year

SOC255 The Creation of Nationalism, Nationalist Cultures and Symbols/Lecture, Discussion

At a time of rapid global changes and globalization, nationalisms and nationalist cultures have grown dramatically. This course explores how nationalist identities and resistance are determined by culture and the cultural symbols, such as key consumer commodities, cultural symbols, gender, language and dress codes. Ms. Bhachu/Offered every other year

SOC258 Women in Jewish Culture/Lecture, Discussion

Seeks to uncover the experiences of Jewish women and uses gender analysis to enrich our understanding of Jewish life. Raises questions about the image and status of women in texts, rituals and communal practices from the biblical period to the present. Ms. Tenenbaum/ Offered every other year

SOC259 Sociology of Organization/Lecture, Discussion

Examines the theory and practice of organizations. Students examine major concepts in the historical development of modern organizations (e.g., bureaucracy) and apply their learning to the investigation of contemporary problems and issues of complex organizations. Ms. Ewick/Offered periodically

SOC260 Roots and Routes: Immigrants, Diasporas and Travel/Lecture, Discussion

Examines immigrants and the cultures they create through movement and settlement and through the many borders they cross. Also covered is the diasporas immigrants create through the travel they undertake both voluntarily and in some cases through forced migration. How do borders, journeys, migration shape the identities of individuals, groups, cultural objects and commodities? Ms. Bhachu/Offered every year

SOC262 Law and Society/Lecture, Discussion

Examines the relationship between law and other aspects of social life. Relying on case studies and other empirical studies of the legal system, particular attention is paid to the following topics: law and justice, crime and social control, law and social change, civil justice and legality and everyday life. Ms. Ewick/Offered every year

SOC263 Deviance/Variable Format

Why are some behaviors, differences and people stigmatized and considered deviant while others are not? This course examines theories of social deviance that offer answers to this and related questions such as: How and why are behaviors designated as deviant? How do individuals enter a deviant lifestyle? And how do various social statuses, such as sex, affect the incidence, type and responses to deviant acts? Ms. Ewick/Offered periodically

SOC264 Organized Crime and Corruption

This course is designed to familiarize students with recent research on organized crime, with an emphasis on the following factors: comparative historical accounts of organized crime movements, particularly in Sicily, the Americas and Russia; the social roles of organized crime in interaction with other social institutions; the role of organized crime and corruption in interaction with political institutions. Students should be able to develop a perspective on how organized crime and corruption develop and function, how they relate to institutions in the wider society, and how political and law-enforcement intuitions have attempted to respond. SOC262 or SOC263 is a prerequisite. Mr. Gordy/Offered every two years

SOC265 Social Movements: Quest for Justice/Variable Format

Modern American movements (labor, civil rights, new left, global justice) are used as examples for discussion of social movements. Problems of framing, resources and identity are analyzed. The form of the course depends on the number of students registering. Mr. Ross/ Offered periodically

SOC267 Poverty and Social Policy in Comparative Perspective

The course compares the U.S., Canadian and (Western) European social-policy regimes. It includes an introduction to how poverty is defined in the U.S. and internationally, and the strengths and weaknesses of these measurements and shows students how to use online sources to find local and national data about poverty and low income. Social insurance and income supports, labor relations and health policies are among the topics explored in the relevance for the working poor. Mr. Ross/Offered periodically

SOC270 Education and Inequality Seminar

Focuses on the relationship between social class, race and the institution of education. Some of the topics we explore include elite prep schools, the racial achievement gap, campus race relations and public funding. Prerequiste: SOC200 or SOC252. Ms. Tenenbaum/Offered periodically

SOC275 Family Issues in an Aging Society/Seminar

Examines how the aging of the American population has affected family life for both older and younger generations. Emphasizes a life-course perspective and gives attention to the impact of mid-life family events on later life relationships. Topics include family caregiving, divorce and remarriage, widowhood, grandparenthood and intergenerational relationships. Prerequisites: SOC175 or SOC180. Ms. Merrill/Offered every other year

SOC276 Environment and Inequality

A capstone seminar that focuses on the relationship between social inequality and environmental problems, especially the connections between the unequal distribution of wealth and power, and the causes and consequences of environmental degradation. All students conduct empirical research using data sets provided by the instructor. Prerequisite: SOC200. Mr. London/Offered periodically

SOC282 Contemporary Sociological Theory/Seminar
Examines various currents in sociological theory, which developed during the last half of the 20th century. Considers relationships among social theory, political ideology and power. Topics may include, but are not limited to, feminist theory, cultural theory, globalization and critical theory. Mr. Gordy/Offered occasionally

SOC285 Social Policy, Immigration and Poverty/Seminar
Analyzes who is poor and how government policy affects the poor. Compares the U.S. experience to Western Europe, and addresses the question of whether there is a permanent underclass of poor people. Additional issues of policy and analysis vary by year. Prerequisite: SOC200 or instructor's permission. Mr. Ross/Offered every other year

SOC288 Globalization: Fashion and Foul Play/Seminar
Examines processes of economic and social development. Focuses on changes in the structure of industrial regions of the advanced capitalist countries and changes in the structure of developing and more peripheral regions. The conceptual framework is that of a global capitalist system undergoing significant transformation in the development of labor and capital. Prerequisites: SOC200 or instructor's permission. Mr. Ross/Offered periodically

SOC290 Cities in Global Perspective/Seminar
Based on three dimensions of comparison: historical, cross-national within advanced capitalism, and a contrast between the processes and structures of urbanization in the First and Third Worlds. Prerequisites: SOC125 or instructor's permission. Mr. Ross/Offered periodically

SOC294 Global Ethnographies: Ethnographers in the Making for the 21st Century/Seminar
Focuses on emergent ethnographic concerns, which attempt to capture fluid cultural processes and connections as they unfold in late-1990's global arenas. Deals with multiple-sited ethnography of movement, displacement, replacement and the global traffic in culture. It also analyzes traditional ethnographies and ethnographic methods of the founding pioneers, including the work of the famous Clark University ethnographer Franz Boas. Prerequisites: SOC160 or instructor's permission. Ms. Bhachu/Offered every year

SOC296 Internship Seminar: Gender
Focus changes each year depending on faculty interest. Foci include gender, community organizing and aging. Prerequisites: SOC110 or SOC175 or WS110 or instructor's permission. Ms. Tenenbaum/Offered periodically

SOC298 Thesis Studies
Independent study submitted for honors consideration for senior sociology majors. Students should sign up with the faculty member whose areas of interests are most suited to their own. The emphasis is on independent research undertaken with faculty guidance and supervision. Generally requires two credits in each semester of the student's senior year and culminates in a thesis submitted for honors consideration. Staff/Offered every year

SOC299 Sec. 9 Internships in Sociology
Supervised field training in community and organized settings is available. Internship is the equivalent of one to four full courses in sociology. Variable credit. Staff/Offered every semester

SOC299.1 Directed Readings in Sociology
Staff/Offered every semester

SOC299.2 Directed Research
Staff/Offered every semester

SOC299.5 Special Projects
Staff/Offered every semester

VISUAL AND PERFORMING ARTS

Ben Korstvedt, Ph.D. - *Chair*

Visual and Performing Arts is composed of individual academic programs in art history, studio art, music, screen studies and theater arts. Whether students prefer to study the history, criticism, philosophy and theory of the arts or to engage in the creative activity of studio work, composition or performance, there are courses, concentrations, minors, specializations and majors available. A major in a given area can be the core for a preprofessional program; or the student may cross traditional disciplinary lines—by double majoring, for instance, or by designing a major or combined major that includes two or more areas of study. Students, with a program director, may develop a four- or five-course sequence as a minor or an area of specialization. Majors and nonmajors are welcome to attend the many art exhibitions, film presentations, and musical, theatrical and dance performances.

Because art reflects the trend of thought and the impact of events of its time, it relates to many other areas of study—history, philosophy and psychology. The study of the arts thus can enhance one's understanding and appreciation of other disciplines. For students interested in the arts, humanities, or social and natural sciences, the study of art can provide both majors and nonmajors with an especially enriching liberal-arts education. Courses in art offer opportunities to develop critical skills, acquire resources for visual thinking and communication, and engage in personal creative expression. For both future art scholars and professionals, Clark's art programs provide a solid foundation that will serve them well in their graduate studies or careers.

The Visual and Performing Arts Department is part of the Higgins School of Humanities.

ART HISTORY

Program Faculty

Kristina Wilson, Ph.D. - *Director*
Rhys Townsend, Ph.D.

Part-Time Faculty

Nancy Burns, M.A.

Visiting Faculty

Andrea Lepage, Ph.D.

Program Overview

The art history major focuses on the visual arts and the social, cultural and historical context in which art is created. Majors may take courses in Ancient, Renaissance and Baroque, and Modern art history or other areas. For those considering teaching, museum and gallery work, arts conservation or arts management, the major is designed to meet the student's needs and may include an internship at an appropriate institution.

Undergraduate Requirements

A total of 14 courses are required, 10 of which are art history courses.

1. Art History Courses
    - ARTH010 From the Stone Age to Our Age (or equivalent course or superior advanced-placement performance)
    - ARTH150 Methodology and Historiography
    - Eight courses in the following areas: Ancient, Renaissance/Baroque, Non-Western and Modern, with not more than two courses in any one area; a total of three must be at the 200 level.
2. Related Courses
    - Four courses in visual and performing arts, of which two must be in studio art. These courses must be selected in consultation with the adviser.

Double and Combined Majors

Because of its interdisciplinary nature, students may wish to double major in art history and another discipline. In such cases, the number of required courses is reduced to 11. Another option is the combined art history-studio art major. Eight art history courses and three visual and performing arts courses normally serve as the art history component of a double major or a student-designed major. A combined major, requiring a minimum of eight art history courses, may be developed in consultation with the studio art and art history program advisers.

Honors Program

Requires the 14 courses for the art-history major, including a directed reading (ARTH299 Sec. 1) in the fall of the senior year and the senior honors thesis (ARTH299 Sec. 8) in the spring. Students wishing to take honors in art history should identify an area of interest, choose an appropriate adviser and apply for eligibility to the art history faculty before the end of the junior year. See the course description under ARTH299 Sec. 8 Honors in Art History, for details.

Art History Minor

All courses and seminars in this program are open to nonmajors. Students whose major lies in another discipline may minor in art history. Six courses are required for the art history minor.

Requirements:

- ARTH010 From the Stone Age to Our Age
- Five additional courses, with no more than three in one area of specialization (i.e., Ancient, Renaissance/Baroque, Modern) and at least two at the 200 level.

Courses

ARTH010 From the Stone Age to Our Age: Monuments and Masterpieces of Western Art/Lecture, Discussion

Begins with a reach back in time to the dawn of history 20,000 years ago when the earliest creators in the Western world painted powerful images of animals on walls located in the eerie, dank depths of cave interiors. This startling act marked the beginning of communication through visual images. We will move chronologically through history, exploring the major monuments and masterpieces of painting, sculpture and architecture, and the cultures that produced them. By focusing primarily, although not exclusively, on select key monuments—the Pyramids, the Parthenon, the Pantheon—and on the masterpieces of major artists—Raphael, Rembrandt, Renoir, Rothko (among others)—from prehistoric times to our own computer age, we will gain an understanding of visual culture and of the needs and aspirations that are expressed. Mr. Townsend, Ms. Wilson/Offered every semester

ARTH105 The Aegean World

An introduction to the architecture, sculpture and painting of Egypt and the Aegean during the Bronze Age. The course covers the Old and New Kingdoms of Egypt, the cultures of the Aegean islands, Crete and mainland Greece. Examines artistic forms and traditions of each region in order to shed light on the individual religious and social contexts in which they evolved. Highlights the archaeologists whose discoveries have illuminated the history and artifacts of these lands. Field trips to area museums. Mr. Townsend/Offered every other year

ARTH106 Introduction to Archaeology

Concentrates on the Mediterranean region, tracing the history and methods of archaeology—emphasizing its unique combination of the sciences and the humanities—from its first steps to its technologically advanced state today. Selected case studies will demonstrate how archaeology has illuminated the ancient world. Also examines the newly developed field of underwater archaeology. Mr. Townsend/ Offered every other year

ARTH109 Classical Myth and the Greek

Investigates selected classical myths and the concept of the "Greek ideal" as expressed in art, both in classical Greece and Rome and in various later periods, including the 20th century. Approaches the myths from the standpoint of origin and significance, changing modes of representation and manipulation for political purposes. The "Greek ideal" is also examined both as it originally developed and as it was conceived in subsequent ages. The course also considers the changing attitudes towards the classical world and the significance of the classical tradition in art and history. Field trips to area museums.
Mr. Townsend/Offered every other year

ARTH110 Ancient Greek Art

This intensive survey reviews Greek art from the collapse of the Minoan-Mycenaean world in the 12th-century B.C. to the close of the Hellenistic period in the first-century B.C. Geographically, it reaches from Greece, westward to the Greek cities of South Italy and Sicily and eastward to the Hellenized lands of Asia Minor, Egypt and the Near East. The course discusses the concept of artistic originality and stylistic development, the relationship between art and politics and the contribution of Greek art to the history of the visual arts in the Western world. Field trips to the Worcester Art Museum and the Boston Museum of Fine Arts. Mr. Townsend/Offered every other year

ARTH111 Roman Art and Architecture/Lecture, discussion

See Classics 111.

ARTH114 Ancient Cities and Sanctuaries

Introduces the great urban and religious centers of the ancient world. The course examines the concept of the city as it first evolved in the Near East and as it developed in classical Greece and Rome. The course emphasizes both the design and structure of urban spaces and the factors affecting town planning. Discusses ancient sanctuaries not only as areas of religious worship, but also as centers of cultural activity involving theater, art, athletics and politics. Cities and sanctuaries are viewed in their historical setting as part of the larger civilizations, which nurtured them. Mr. Townsend/Offered every other year

ARTH118 Art in the Age of Alexander the Great/Lecture

By his death in 323 B.C., at age 33, Alexander the Great had conquered most of the known world, his empire stretching from Greece to the Indus River Valley of India. In the process, he transformed this region into a polyglot, multicultural mix that has been compared to the global village in which we live today. This course examines the life and times of Alexander and his followers through the record of the material culture they left behind: architecture, sculpture, painting, gold, coins, jewelry and everyday artifacts. It specifically examines how culture is shaped by such material goods and uses an historical perspective to gain insight to the ever-changing profile of our society today. Trips to area museums. Mr. Townsend/Offered every other year

ARTH124 Italian Art from Giotto to Botticelli/Lecture, Discussion

Examines one of the most crucial periods in Western art, the Early Renaissance in Italy. Investigates painting, sculpture and architecture in their cultural and historical contexts from the trecento (1300s) to the late quattrocento (1400s), with a focus on Tuscany and its flourishing capital, Florence. Explores the movement away from Byzantine and Gothic art toward a new, uniquely Italian style emphasizing humanity, realism and science. Assesses how humanist studies, republican politics, monastic reform and the emergence of a wealthy mercantile class affected artistic style and theory. Considers artists, growing self-awareness as professionals contributing to contemporary intellectual developments and the ideology of genius. Artists highlighted in this course include Giotto, Brunelleschi, Donatello, Ghiberti, Fra Angelico, Piero della Francesca and Botticelli. Field trips to area museums. Staff/Offered every other year

ARTH125 Art in the Age of Michelangelo/Lecture, Discussion

Focuses on the art of the 1500s in Italy, an era comprising the High Renaissance and Mannerism, perhaps the single most influential period in Western art after classical times. Investigates painting, sculpture and architecture in the major Italian cultural centers of Florence, Rome, Milan, Parma, Mantua and Venice. Considers questions of style, influence, patronage, art theory and scholarly and religious developments. Highlights the work of Michelangelo, including the recently restored Sistine Chapel frescoes, the Medici Tombs, the David and the Pietà. Also considers the work of Leonardo da Vinci, Raphael, Correggio, Giorgione and Titian, and their relationship to Michelangelo and his legacy. Looks at the rise of papal Rome and the building of St. Peter's basilica and the Vatican palaces. Field trips to area museums. Staff/Offered every other year

ARTH131 Baroque Art in the Age of Bernini/Lecture, Discussion

Considers Italian art and architecture from around 1580 to 1680, the age known as the Baroque. An era of astonishing artistic activity, it was marked by lavish patronage by popes, cardinals and princes, centering on the cosmopolitan capital of Rome. This period was characterized by fundamental changes in society, including the birth of the Catholic church as a concept, new and revolutionary scientific discoveries, a new global awareness and the growth of political absolutism. Explores how these developments informed the style, iconography and patronage of art. Highlights Italian artists Caravaggio, Bernini, Borromini and Pietro da Cortona, as well as foreigners working in Italy such as Poussin and Claude Lorrain. Topics considered include the rise of landscape painting, still life and genre painting, as well as the concept of the Baroque unity of the arts. Field trips to area museums. Staff/Offered every other year

ARTH140 Modern Art: 19th Century/Lecture, Discussion

Examines neoclassicism, romanticism, realism and impressionism. Studies the development of landscape painting in England, France and the United States in relation to the rise of urbanization and industrialization, and the origins of an "avant-garde." Ms. Wilson/Offered every other year

ARTH142 Art and the Experience of Modernity, 1880-1940/Lecture, Discussion

A survey of the major movements in avant-garde art from the late-19th century to World War II in Western Europe and the United States. We will examine how the art of this period—painting, sculpture, collage, photography, architecture—engaged the modern world through strategies as varied as resistance, subversion and open embrace. The course begins with the generation of neo- and postimpressionist painters, covers the development of abstraction and concludes with the surrealist dreamscape. Ms. Wilson/Offered every other year

ARTH143 Art from 1940 to 1970: Modernism and its Discontents/Lecture, Discussion

A survey of the major trends in art between 1940 and 1970, focused primarily, but not exclusively, on the art scene in Europe and the United States. We will begin with the emergence of New York as the center of the international avant-garde and the seat of Abstract Expressionism in the years after World War II. The course will then trace the disintegrating confidence of the mid-20th-century modernist moment, examining such movements as neodadaism, pop art, minimalism and the land artists of the late 1960s. Ms. Wilson/Offered every other year

ARTH144 Art Since 1970

A survey of the major trends in art since 1970, focused primarily, but not exclusively, on the art scene in Europe and the United States. We will begin with the art movements of the 1970s that challenged the traditional definition of "a work of art," including conceptualism and body art. The course will continue with the rise of postmodernism and the death (and resurrection) of the author through the expanded field of painting, sculpture, video, and installation art in recent decades. We will study this art in light of contemporary social and political concerns, such as feminism, the pervasiveness of commercial culture and the increasing globalization of identity. Ms. Wilson/Offered every other year

ARTH150 The Art of Art History: History and Methods/Seminar

This seminar is intended primarily for art history majors. It explores the major critical questions that art historians have asked, and attempted to answer, in the past 150 years. Through selected readings and the close examination of works of art, we will discuss the major theories that have shaped the way art historians look at art, write about art, and talk about art. Our topics will include formalism, social art history, biography, semiotics and iconography, feminism and gender studies, race and global identity, and the role of the museum. Ms. Wilson/Offered every other year

ARTH159 Latin American Art/Lecture, Discussion

Surveys the art and architecture of Latin America, ranging from Argentina to the United States, from the pre-Columbian period to the present. Begins with an exploration of the art of Mesoamerica and the

Andes before the arrival of the Europeans, including the Maya, Olmecs, Aztecs and Inca. Explores the cultural convergence that resulted from the conquest in the 16th century, focusing on the role of indigenous artists and traditions in the formation of early Colonial culture. Traces the development of the colonial arts, considering the role of civil and religious patronage, the rise of the art guilds, the international makeup of European cultures in the Americas and the relationship with the arts of Spain and Portugal. Considers the rise of nationalism in the 17th and 18th centuries and its effect on the arts, including the revival of Amerindian forms by the independence movement in regions that would later become Peru and Mexico. Explores the development of the arts from independence from Spain and Portugal in the early 19th century to the present, including a consideration of Chicano art in the United States. Field trips to area museums. Staff/Offered every other year

ARTH160 The Arts of Asia/Lecture, Discussion

The 21st century has been called the "Asian Century" in anticipation of the leading role that Asia will play in the world's economic, political and cultural life. This course journeys through the history of the art and architecture of the most important civilizations in the Far East: China, Japan and Korea. Begins with China, whose arts tradition developed in isolation for over a millennium before exerting a profound influence on the nascent visual-arts cultures of Japan and Korea about 2,000 years ago. Explores how those two regions developed unique art forms that were repeatedly still affected by new waves of influence from China. Considers ancient bronzes, scroll and screen painting, religious sculpture, ceramics and decorative arts and architecture. Examines the function of these arts in society; the relationship between art and the great religions and philosophies of Daoism, Shinto, Confucianism and Buddhism (especially Chan or Zen Buddhism); the diversity of art patronage (emperors, warlords, monks and literati); and the relationship of art to the past. Field trips to area museums. Staff/Offered every other year

ARTH161 The Arts of Islam/Lecture, Discussion

Islamic peoples make up one third of the world's population, historically embracing regions as diverse as Spain, North Africa, the Middle East, India and Central Asia. Their culture is dynamic and diverse, and intimately related to neighboring civilizations in Europe, the Far East and Sub-Saharan Africa. Examines the art and architecture of Islam from the lifetime of the Prophet Muhammad (d. 632) to the present. Considers the development of the mosque and madrasa (religious college), miniature and mural painting, ceramics, ivory, metalwork, textiles and other arts. Explores the religious disinclination toward figural art and the growth of the "arabesque," or geometrical/floral patterns. Also examines the flourishing figural tradition that existed in nonreligious art. Monuments considered include the Alhambra in Granada, the Great Mosque of Damascus, the Dome of the Rock in Jerusalem and the Taj Mahal. Field trips to area museums. Staff/Offered every other year

ARTH211 Seeing and Hearing in the Renaissance

See Music 211.

ARTH215 The Temple Builders: Architecture in Ancient Greece

Traces the evolution of monumental architecture in Greece from its origins in the Geometric period through its development in Archaic, Classical and Hellenistic times. Emphasizes the integration of craftsmanship, or techne, with elements of design in the Doric, Ionic and Corinthian orders. Discusses the relationship between architect and patron, the social role of architecture and its political impact, as well as the problems of modern investigation and reconstruction of ancient buildings. Mr. Townsend/Offered periodically

ARTH216 Architecture and Democracy/Seminar

This seminar will explore the relationship between the built environment and civic ideology in ancient Athens and 20th-century America. "Built environment" refers to structures in, through and around which a society functions and includes both private and public buildings and spaces. "Civic ideology" means ideas that embody the collective beliefs and aspirations of the citizen body. In particular we will be interested in the relationship between the individual citizen and the state in ancient Athens and 20th-century United States and the means by which architecture acts to construct that relationship. Area field trips. Mr. Townsend/Offered every other year

ARTH219 Seminar in Ancient Art: Portraits and Representation In the Ancient World

This seminar-style course presents a look at portrayal and representation of human beings in the ancient world, focusing on, but not limited to, the Mediterranean civilizations of Egypt, Greece and Rome. In the ancient world, some representations were used as substitute bodies for the deceased, to ensure eternal life for those portrayed. Others were used as voodoo dolls in order to curse a rival. Portraits could reflect the power and status of their subject, but also their values and ideals. Course may be taken for credit more than once. Mr. Townsend and Mr. Nulton/Offered periodically

ARTH230 Caravaggio/Seminar

Focuses on the work of one of the best known artists of any period, the painter Michelangelo Merisi or Caravaggio (1573-1610). Although he died a young man in 1610, he is often considered the most important painter of the 17th century. Explores Caravaggio's intense naturalism and the controversy it caused, his sense of drama and supernatural light and the role of his personality in works of art. Surveys his life in Rome, Naples, Malta and Sicily, considering his religious paintings, genre scenes and still lives. Considers the contradictory aspects of his character: his sexual ambivalence, his criminal violence and his intense spiritual devotion. Explores his artistic legacy in Italy and abroad with a strong emphasis on Artemisia Gentileschi. Readings include art-historical scholarship, history and original documents from the period. Field trips to area museums. Staff/Offered periodically

ARTH232 Converging Cultures in the Age of Discovery/Seminar

A critical assessment of the notion of hybrid art, focusing on the period of European discovery of non-European civilizations from the 16th through 18th centuries. Explores the impact of European Renaissance and Baroque art in a global context, including the Far East, Southeast Asia, India and the Americas. This age of global encounter involved intimate contact between the widest spectrum of peoples, representing different races and religions, as well as political, social, economic and cultural systems. Considers the role of missionaries, merchants and colonial powers in bringing European art to the non-European world, and the differing degrees of contact/conquest that existed between them. Primary focus is on the reaction of non-European cultures such as the Chinese and Nahua (Aztecs) to the new styles and iconographies from Europe, and the perpetuation of indigenous symbols, styles and ideas in the art produced after contact with Europeans. Evaluates the new art styles that were developed as the cultures began to merge, and questions whether transcendent styles or aesthetics emerge from the prolonged interaction of cultures. Staff/Offered periodically

ARTH233 TROPICAL BAROQUE: THE ARTS OF COLONIAL LATIN AMERICA/SEMINAR

Tropical Baroque will be the first seminar devoted to the Renaissance and Baroque art and architecture of Colonial Latin America (1492-1820), an arts tradition of greater richness and diversity than many in Europe itself. It will include not only Spanish America, including New Spain (Mexico, New Mexico and California), the Andean region, the Caribbean, Brazil and the Southern Cone (Argentina, Chile, Paraguay and Uruguay), but also the former Portuguese territories in Brazil. The course will consider architecture, including palaces and villas, cathedrals and churches, and fortresses and public spaces. It will also examine painting and sculpture, both religious and secular, as well as the so-called minor arts such as furniture, metalwork, textiles and ceramics, which have received much attention in recent scholarship. The field of Colonial Latin American art is enjoying a renaissance in recent years. The people and societies who produced and used this art and architecture came from the widest spectrum of backgrounds and walks of life. They included Amerindians, Africans, Asians and mestizos, as well as Europeans from places as varied as Spain, Italy and Bohemia. Mirroring the incredible diversity of Latin America's natural landscapes, colonial art and architecture blended styles and techniques from Aztec, Inca and Guaraní civilizations with those from Europe, North Africa and the Far East to produce works of unprecedented creativity and originality. Staff/Offered periodically

ARTH239 SPECIAL TOPICS: RENAISSANCE AND BAROQUE ART/SEMINAR

Introduces specific problems in Renaissance and Baroque art and focuses on student research, oral presentation and writing skills. Qualified students from other disciplines are welcome. Staff/Offered periodically

ARTH243 DESIGN IN THE 20TH CENTURY: ARTS & CRAFTS TO IKEA

A survey of modern design in the Western hemisphere, including furniture, textiles, appliances, logos and graphic design, and architecture. Throughout the 20th century, modernists have used design to promote various reformist agendas—reform of working conditions for the industrial laborer, reform for the lifestyles of individual consumers, and reform of the values held by society at large. This course examines the objects and buildings that were designed to be the vehicles of social change, and analyzes their aesthetics as well as their ideological agendas. The course begins with the radical Arts & Crafts movement in Britain and the United States, and then covers International Style architecture and Bauhaus design in the 1920s, biomorphic and atomic-age design in the mid-20th century, the design of appliances and automobiles in the postwar period, and postmodernism in the late-20th century. The course concludes with an analysis of our own contemporary, design-obsessed society, investigating the populist agenda of such enormous commercial empires as Target and Ikea. Prerequisite: A lecture class in modernist art strongly recommended. Ms. Wilson/Offered every other year

ARTH245 URBAN ART AND SOCIETY IN JAZZ AGE NEW YORK

In the 1920s and early 1930s, New York City was home to (or the inspiration of) some of the nation's most innovative visual, literary and cinematic works. In this interdisciplinary seminar, we will investigate skyscraper architecture, paintings of city life, advertising photography, The Great Gatsby, art-deco furnishings, the Harlem Renaissance and flapper movies. Through a mixture of secondary literature and a wide range of primary sources, we will explore broader themes such as the changing boundaries between "low" and "high" culture and the construction of an urban American identity as inflected through race, gender and class. Ms. Wilson/Offered periodically

ARTH248 GENDER AND REPRESENTATION/SEMINAR AND PRACTICUM

An exploration of the manifold ways gender affects the production and reception of art. The course will consider the role of gender in art from three perspectives: 1) how gender affects the artist's sense of self; 2) how gender affects pictorial representation; and 3) how gender impacts the way one views a work of art. The course will focus primarily on late-19th-, 20th- and 21st-century art, with individual classes devoted to selected artists or thematic issues. Ms. Wilson/Offered every other year

ARTH249 SPECIAL TOPICS: MODERN ART/SEMINAR

Introduces specific topics in the study of modern art. Research and writing intensive; qualified students from other disciplines are welcome. Ms. Wilson/Offered periodically

ARTH297 HONORS IN ART HISTORY: SENIOR YEAR

Qualified students who take Honors in Art History should identify an area of interest, select an appropriate adviser and apply for eligibility to the art-history faculty before the end of the junior year. The honors thesis is a yearlong project, for which the student will take 299.1 Directed Reading or 299.2 Directed Research, in the fall of the senior year and 299.8 Honors in Art History, in the spring semester. A second reader, chosen by the student and the adviser, will participate in the final evaluation. Credit is given for course work completed, even if a student is not recommended for honors. Staff/Offered every year

ARTH298 INTERNSHIP

ARTH299 DIRECTED STUDY

Program Faculty

Benjamin Korstvedt, Ph.D. - *Director*
Matthew Malsky, Ph.D.
John McGinn, D.M.A.

Part-Time Faculty

Richard Cain, M.Mus.
Katherine FitzGibbon, M.Mus.
Kallin Johnson, M.Mus.
Sima Kustanovich, M.Mus.
Peter Sulski, B.Mus.

Affiliate Faculty

James Allard,
Gayle Berman, M.Mus.
Donald Boothman, B.A.
Paul S. Jr. Buono, M.Mus.
Stephanie Busby, M.Mus.
Jonathan Clark, M.Mus.
Deborah Cole,
Michael C. Connors,
Joseph W. D'Angelo,
Susanne Friedrich,
Joseph Halko,
Malcolm Halliday, M.Mus.
Tracy Kraus, M.Mus.
Sally Merriman, B.Mus.
Steve Mossberg, B.Mus.
Pieter Struyk, B.Mus.
Robert Paul Sullivan,
Anita Sulski, B. Mus.
Paul Surapine, B.Mus.
Douglas Weeks, M.Mus.

Emeriti Faculty

Gerald Castonguay, Ph.D.
Wesley Fuller, M.Mus.
Hartmut Kaiser, Ph.D.

Program Overview

The program offers both a major and a minor, as well as courses and activities for the nonmajor. Courses are designed to teach students to listen to music intelligently, develop musical perception, master basic skills of music and apply them creatively, and acquaint students with representative works from various periods of music history. The study of music can open new perspectives on many aspects of culture and society and the program stresses the advantages of combining professional musical development with the humanistic breadth offered by a strong liberal education.

Courses are open to majors and nonmajors, and assignments are designed to suit the different goals and backgrounds of the students in each category.

Undergraduate Requirements

Core requirements, taken by all majors (3 courses):

- MUSC100 Studying Music Historically and Critically
- MUSC121 Music Theory I
- MUSC141 Computers and Music

The Concentrations (7 additional courses):

(1) Performance *(admittance to this concentration requires approval of the MUSC180 instructor)*

Intermediate level

- Three semesters MUSC180
- MUSC122 Music Theory II
- One music history course (from MUSC101, 102, 104)
- One additional music course

Upper-level

- Music 290 Capstone project (half recital with a complementary paper)

(2) Music History and Criticism

Intermediate level

- Three music history courses (MUSC101, 102, 104)
- MUSC122 Music Theory II
- One music theory/composition course (from MUSC128, 220, 223, 224) or music technology course (from MUSC142, 160, 200)
- MUSC210 Seminar in Music History and Criticism

Upper-level

- MUSC290 Capstone Project (or, with prior approval, an additional MUSC210 may serve as the capstone)

(3) Music Theory/Composition

Intermediate level

- MUSC122 Music Theory II
- Three Music Theory/Composition courses (from MUSC128, 220, 223, 224)
- One music history course (from MUSC101, 102, 104)
- One music technology course (from MUSC142, 160, 200)

Upper-level

- MUSC290 Capstone Project (or, with prior approval, an additional MUSC220 may serve as the capstone)

(4) Music Technology

Intermediate level

- MUSC142 Recording Practice and Audio Art
- Two music technology courses
- One music history course (from MUSC101, 102, 104)
- One music theory/composition course (from MUSC122, 220, 224)
- One additional music course

Upper-level

- MUSC200 New Media Seminar (with prior approval, an additional MUSC200 may serve as the Capstone)
- or MUSC270 Independent Study in Computer Music

Additional Requirements:

- One nonmusic visual and performing arts course pertinent to the student's interest
- Two semesters in a music ensemble (MUSC170, 171, 172, 173, 174, 175)
- Passing the Keyboard Skills Exam or two semesters of Keyboard Skills Lab (I and II)
- Passing the Aural Skills Exam or two semesters of Aural Skills Lab (I and II)

Note on MUSC180. Students in nonperformance concentrations (music history and criticism, music theory/composition, music technology) are allowed to enroll in up to two semesters of MUSC180 (Private Lessons for credit). If so, such will be in addition to, rather than in fulfillment of, the above-stated requirements.

Honors Program

The intention to pursue an honors degree must be declared before the start of the junior year and requires approval of the full-time music faculty. Approval of Music 180 instructor is also required for honors in performance.

(1) Honors in Performance is possible with:

- a Junior Honors Recitals (half program)
- two semesters of MUSC280 Honors Recital in the senior year
- a Senior Honors Recital (full program) with complementary paper

(2) Honors are possible in any of the other tracks with:

- two additional music courses relevant to the student's interests, and
- an Honors Capstone project to be determined in consultation with the student's music adviser.

Music Minor

A. Music Minors (other than Jazz)

Core requirements, taken by all minors (three courses):

- MUSC100 Studying Music Historically and Critically
- MUSC121 Music Theory I
- MUSC141 Computers and Music

Minor Concentrations (three additional courses each):

Minor in Performance

Three semesters of MUSC180 (Private lessons for credit; note that acceptance to the minor in music performance requires approval of Music 180 instructor and full-time music faculty)

Minor in History/Criticism

Three music history courses (from MUSC101, 102, 104, 210)

Minor in Theory/Composition

MUSC122 Theory II

Two music theory/composition courses (from MUSC128, 220, 223, 224)

Minor in Music Technology

MUSC142 (Computer Music II)
MUSC160/220 Soundtracks
MUSC200 New Media Seminar

B. Minor in Jazz Studies

- MUSC100 or 104
- MUSC121 Music Theory I
- MUSC141 Computers and Music
- MUSC151 Jazz History
- One pertinent course in 20th-century American History and/or Communications and Culture
- Two semesters of MUSC180 on a jazz instrument (Note: an independent study in Jazz theory/composition may be substituted for one of these semesters.)
- Two semesters participation in the Jazz Workshop or Combo

Courses

MUSC010 Introduction to Music/Lecture, Discussion

Designed for the nonmajor, the course expands the concept of the musical experience and develops discriminating listeners. The course includes an introduction to principles of rhythm, pitch, timbre (and their notations); the principles of structure; the aesthetics of music; specific forms including fugue, sonata form, variations; and selected historical styles. Staff/Offered every year

MUSC011 Music as Culture/Lecture, Discussion

Students study and listen to the differences and likenesses in music from a wide variety of cultures and consider the ways in which music, ranging from classical art music to music for work and communal celebration, functions within a selected group of world cultures. Includes guest performers of ethnic music. Staff/Offered periodically

MUSC012 Pop Music in the USA/Lecture, Discussion

Beginning with what is (arguably) the start of the popular in American music, this course will examine Tin Pan Alley, Blues, Country, R&B, Swing, early Rock 'n Roll, Motown, the Folk Revival, the British Invasion, Psychedelic Rock, Progressive Rock, Punk, Disco and Heavy Metal, as well as some more recent music. The course will focus on understanding the stylistic and historical practices of this wide range of popular music. The principle perspective of the class will address popular music as an audible text as an artifact of, and contributor to, popular music culture. No previous musical experience (such as the ability to read or play music) is assumed. However, a willingness to listen to all of this music carefully and to engage a variety of theoretical approaches is presumed. Staff/Offered periodically

MUSC014 Introduction to World Music

This largely nontechnical survey course seeks to foster a meaningful understanding and appreciation of diverse musical experiences from around the globe. Our explorations will alternate between two distinctive approaches: (1) studying the musical cultures of specific geographical areas and (2) discussing broader topics of comparison between cultures. The ultimate aim is for each student to attain a more holistic, global perspective from which to savor each experience. Assignments will help students to listen more actively and also examine how their own basic assumptions about music—what they take for granted—may comprise just one corner of a larger and richer "world" of musical possibilities. Staff/Offered periodically

MUSC016 Popular Music in 20th-Century American Culture

Music was one of the most vibrant and meaningful elements of 20th-century American culture. This seminar will cover major forms of American popular music, notably Blues, Jazz, the American popular song from Foster through Cole Porter to Dylan, rock and country music. Along with extensive listening work, the course will focus on exploring ways in which music was taken up by the cultural discussion of the times. Also at issue will be how music functioned as a social practice that negotiated basic tensions inherent to American society, especially those around race and the changing ways in which music has functioned within the culture industry. This course will be concerned primarily with discussion and explication of readings and music. Readings will be drawn from a range of music criticism and other writings about music. In addition, students will be involved in a series of projects including short papers, small-group studies and in-class presentations. Mr. Korstvedt/Offered periodically

MUSC018 Private Instruction in Instruments and Voice

Lessons are taken for noncredit. Areas offered: same as MUSC180. Lessons taken for noncredit require no prerequisite and are recommended for beginners. The fee is not covered by tuition. For more information see MUSC180 and/or contact the music office. Staff/Offered every semester

MUSC100 Studying Music Historically and Critically

This course is designed to introduce you to the fascinating world of college-level musical study and get you directly involved in it. Along the way, you will develop the knowledge base and the methodological tool-kit needed for more advanced course work in music. The course is required for all music majors and minors, for whom it is a prerequisite for other more specialized music history courses. The course surveys major style periods of Western music (Renaissance, Baroque, Classical, Romantic, Modern). We will study in-depth five major works, which are representative of these style periods, getting to know and understand them though listening, analysis, criticism and contextual history. Over the course of the semester you will encounter and try out some of the major musicological approaches ranging from contextual cultural history, listening as a mode of analysis, critical interpretation, and music history as detective work. There is no formal prerequisite, but since the course is designed primarily for students who anticipate majoring or minoring in music, it is expected that students enrolling in the course will have some musical background and basic music-reading skills. Mr. Korstvedt/Offered every year

MUSC101 Bach and Before: Studies in Music before 1750/ Lecture, Discussion

An exploration of European music from the Middle Ages through the Baroque period or from the 10th century AD to ca. 1750. This grand slice of music history—more than seven centuries—encompasses a fascinating variety of music: Gregorian Chant, Medieval polyphony, the Renaissance Mass and Motet, the birth of opera, the rise of instrumental genres, and the culminating achievements of the High Baroque. Through a mix of listening, reading, discussion and various written assignments, the course explores how music evolved and participated in the many major cultural, historical and social transitions between the Middle Ages and the Age of Absolutism. Several final weeks of the semester are devoted to the greatest musical figure of the mid-18th century, Johann Sebastian Bach. Previous musical experience is helpful, but not required. Mr. Korstvedt/Offered periodically

MUSC102 Music of the Classical and Romantic Periods/ Lecture, Discussion

This course explores European music from the mid-18th century through the end of the 19th century. This era was in many ways a high point in the history of musical art and many of the greatest and most beloved composers were active during this time, including Haydn, Mozart, Beethoven, Schubert, Berlioz, Chopin, Verdi, Wagner, Brahms and Mahler. Through a mix of listening, reading, discussion and various written assignments, students will develop an understanding of representative works by these composers, build a sense of the social and cultural contexts in which they worked, as well as sharpen their aesthetic appreciation of this music. Previous musical experience is helpful, but not required. Mr. Korstvedt/Offered every year

MUSC103 20th-Century Musical Explorations/Lecture, Discussion

Explores the abandonment of functional tonality by many (though not all) Western concert composers after 1900 and the resultant explosion of new musical techniques and systems. Focuses on the remarkable rejections and explorations that characterize much of Western art music since 1945. Prerequisites: None beyond an adventurous ear. Mr. McGinn and Mr. Malsky/Offered periodically

MUSC104 Music and Modernism in Society, 1885-1945/ Lecture, Discussion

This course is an exploration of the role and the fate of classical music in modern culture between 1885 and 1945. It is not a comprehensive survey; rather, the course is a guided journey to and from some of the high points—and low points—of 'serious' music in this era. We will plunge into the often extreme aesthetic experience of 20th-century music. We will get to know, appreciate and understand (and love!) works by a number of the major composers of the era. We will explore crucial issues of music and cultural politics, especially in the context of war and 20th-century totalitarianism. We will also focus on issues of audience, 'high' and 'low' art, and cultural politics raised by musical modernism. The course is designed to serve the need of music majors and minors and especially those of interested nonmajors. We will, of course, deal very directly with music, but the intention is to do so in ways that do not exclude those who have little or no formal training in music. The essential prerequisites are a willingness to approach the music we address with open ears and mind and a desire to grapple with ideas and art. Mr. Korstvedt/Offered periodically

MUSC110 Rudiments of Music/Lecture

Requires no previous musical training. Students learn to understand, write and create using the basic elements of Western pitch and rhythm. Skills gained enable students to pursue private vocal or instrumental instruction or further study in theory and composition. Staff/Offered periodically

MUSC121 Theory I: Tonality 1/Lecture

Explores the system of tonal music commonly employed by composers of the 18th and early-19th centuries, as well as by composers of popular music today. This study, incorporating exercises, composition, analysis and performance, also examines the way students listen to music in general, thus leading to a deeper understanding of the musical process. Mr. McGinn, Mr. Malsky/Offered every year

MUSC122 Theory II: Tonality 2/Lecture

Extends the study of Western tonality to encompass more advanced techniques such as chromaticism and modulation. Culminates with late-19th-century chromaticism, which reveals both the extraordinary possibilities and ultimately the limitations of using the tonal system as an organizing force in music. Prerequisite: MUSC121. Mr. McGinn, Mr. Malsky/Offered every year

MUSC125 Acoustics

Musical acoustics is an interdisciplinary study of the physical, perceptual and cognitive character of musical sound—a unique blend of science and art. Topics include the elementary physics of vibrating systems, waves and wave motion; the human ear and its response; time- and frequency-domain analysis of sound; room acoustics and reverberation; and the acoustics of musical instruments—the human voice, strings, winds and percussion. The emphasis will be on the practical aspects of acoustics in music making. The class meets as a lecture with a mandatory weekly hands-on laboratory. Mr. Malsky

MUSC128 MUSIC AND WORDS/FIRST-YEAR SEMINAR

It has been said that music is a potent nonverbal "language" in its own right; that it frequently takes over where words leave off. Despite, or perhaps because of this special relationship, words and music have found their way together throughout history and across all cultures of the world. Far from attempting an exhaustive survey, this course will examine carefully selected word-music collaborations that are especially eye and ear catching, that offer enlightening points of comparison, and that raise intriguing questions about the nature of words versus the nature of music. Analytic papers, small group discussions and classroom presentations will help students become more adept at listening actively, comparatively, critically and creatively as they study the relative merits and contributions of text and music in considered examples. Prerequisites: None, though some basic skill in reading music is an asset. Fulfills the Aesthetic Perspective.

MUSC141 COMPUTERS AND MUSIC/LECTURE, DISCUSSION

The computer is, arguably, the most distinctively contemporary musical instrument. A project-based and historically grounded introduction to the computer as a musical tool, this course covers a variety of technical topics such as multitrack digital recording and mixing, the fundamentals of sound synthesis, and digital signal processing. A series of cumulative technical assignments through the semester lead to a large composition project. A variety of musical repertoires will be studied through recordings and readings. Mr. Malsky/Offered every year

MUSC142 RECORDING PRACTICE AND AUDIO ART/SEMINAR

Many following Brian Eno have observed that the recording studio is the musical instrument most characteristic of our time. The majority of the music we encounter is produced using its facilities, production techniques and aesthetics. In the first half of the semester, we'll work with the industry standard digital audio workstation (DAW) ProTools to make a polished multitrack recording. This part of the class will introduce you to sound recording as a process and an art, and will also cover the supporting science and technology that makes it possible. In the second unit, you will be more composer than engineer. You will create a short composition in a sound-collage style called musique concreté beginning with recordings of voices and software for processing and editing. Prerequisite MUSC141 or permission of instructor. Mr. Malsky/Offered every year

MUSC150 JAZZ THEORY/LECTURE, TUTORIAL

Includes a study of the rhythmic/harmonic/melodic structures of jazz, the scalar basis of improvisation, and voicing practice as it pertains to scoring for small and large ensembles Prerequisite: MUSC121 or permission of program director. Staff/Offered periodically by permission

MUSC151 JAZZ HISTORY/LECTURE, TUTORIAL

Studies the evolution of jazz style from its 19th-century beginnings to the present, including African roots, minstrels, ragtime, Dixieland, swing, bop, progressive, cool, free-form and third-stream. Requires a research paper and a final exam. Staff/Offered every year

MUSC160 SOUNDTRACKS/LECTURE

How do sounds and music work in conjunction with (and against) moving images? This class will address this question, both on a practical, do-it-yourself level with a variety of exercises and projects, as well as through a critical and analytical approach with screenings, readings and discussion. The course is organized into three sections. First, we will examine the elements of narrative sound and introduce the practice of audiovisual analysis. In the middle section of the class, we will focus on postproduction techniques. This constellation of practices found in classic narrative films through contemporary ones (that is, the body of films with which most of us are most familiar) will be the subject of scrutiny and emulation through a series of exercises dealing with dialogue, music and sound effects. Third, we will look at a variety of historical conventions—sound and music in silent and transitional/early sound films as well as experimental cinema—and concentrate on live performance of music and sound effects to accompany silent film. Prerequisite MUSC121 or 141 or ARTS167 or SCRN107. Mr. Malsky/Offered periodically

MUSC170 CLARK CONCERT CHOIR/REHEARSAL, PERFORMANCE

A chorus of 30 to 40 voices, the choir presents two major concerts each year on the Clark campus as well as in off-campus appearances. Ms. FitzGibbon/Offered every semester

MUSC171 CLARK CHAMBER CHORUS/REHEARSAL, PERFORMANCE

This is a small, specialized singing group chosen from the larger Clark Concert Choir by the conductor. Admission is by audition. Ms. FitzGibbon/Offered every semester

MUSC172 CONCERT BAND/REHEARSAL, PERFORMANCE

Concert Band consists of 25 members performing two major concerts a year. Mr. Cain/Offered every semester

MUSC173 CHAMBER MUSIC ENSEMBLES/REHEARSAL, PERFORMANCE

The number of small ensembles is determined by the performing talent in a given semester. Standing ensembles include string, woodwind, mixed brass, jazz vocal. Admission is by audition. Staff/Offered every semester

MUSC174 JAZZ WORKSHOP AND COMBO/REHEARSAL, PERFORMANCE

Includes ensemble performance practice with weekly rehearsals throughout the year. An audition is required. Staff/Offered every semester

MUSC175 CLARK SINFONIA/REHEARSAL, PERFORMANCE

The Clark Sinfonia is a string orchestra, which expands to include wind players for some repertoire. It offers two major concerts a year. Mr. Sulski/Offered every semester

MUSC200 AUDIO CULTURE

In this class, we will explore the conditions and practices of technologically mediated listening both contemporary and historical in everyday experience. The power of music in everyday life is widely recognized; it influences mood and creates scenes, routines and occasions. As reflected in social theory from Plato to Adorno, music has a profound influence on character, social structure and action. This course will consider how music is a constitutive feature of human agency and communication. Drawing together concepts from ethnomusicology, communications, psychology, sociology and sociolinguistics, we will study music's active role in the construction of social life and highlight the aesthetic dimension of social order and organization in modern societies. Prerequisite MUSC141, SCRN207, ARTS209 or permission. Mr. Malsky/Offered periodically

MUSC205 The Total Work of Art and Cultural Criticism from Wagner to the Present/Seminar

See German 205.

MUSC210 Seminar in Music History and Criticism

The Music History Seminar takes up specific topics and themes in music history that open onto larger cultural contexts and interdisciplinary lines of inquiry. The seminar is based on active discussion and student research with a depth and a focus not possible in a survey course, and will develop the student's critical skills, as well as the ability to write and talk about music in meaningful ways. Seminar topics change each year. Recent topics have included "Music and Culture in Vienna, 1870-1914," "Richard Wagner: Music, Drama, and Meanings," and "Beethoven, Schubert and the Transformation of Music, 1800-1830." The course welcomes music majors and minors, as well as interested students from other disciplines. The seminar may be taken more than once for credit. MUSC102 and/or MUSC104 are recommended, but not required. Mr. Korstvedt/Offered every year

MUSC211 Seeing and Hearing in the Renaissance

This seminar investigates how art and music were seen and heard in early modern Europe, and treats this exploration as a way to discover how these art forms entered into the cultural discussions of the time. We begin from the idea that people within a given culture share experiences, frames of reference, and modes of thinking and feeling that influence how they perceive and interpret artworks. Our focus, therefore, is not the creation of art, the traditional focus of music and art criticism, but rather the perception and reception of art, as we treat the aesthetic experience as a topic in its own right and as an avenue of new historical understanding. The seminar concentrates on the 16th and 17th centuries, an era in which Europe reached several fundamental turning points that revolutionized Western culture, the most important of which included the revival and creative appropriation of Classical art and thought, the explosive appearance of printed media (which directly impacted our subject areas by means of engravings and printed music), and the enormous ramifications of the Protestant Reformation and the Catholic Counter-Reformation. All three of the developments directly affected art and music, and, perhaps more importantly, both of these arts became mainsprings by which these developments participated in the cultural discussion of the time. Mr. Korstvedt and Ms. Lepage/Offered periodically

MUSC220 Theory/Composition Seminar

Rotating topics include composition, film music (Soundtracks), musical analysis, orchestration and contemporary performance practice. Prerequisites: MUSC121, 122, 223, 224. Mr. McGinn, Mr. Malsky/Offered every year

MUSC223 Theory III: Counterpoint/Lecture, Tutorial, Lab

With a special focus on the definitive tonal counterpoint of Johann Sebastian Bach, this course studies contrapuntal styles and procedures used by composers throughout the development of Western art music as models for independent creative work. Prerequisites: MUSC121, 122. Mr. McGinn, Mr. Malsky/Offered every year

MUSC224 Theory IV: 20th-Century Practice/Lecture, Tutorial

Analyzes compositional techniques of major 20th-century composers and uses them as a basis for composition and analysis assignments. Prerequisite: MUSC223 or instructor permission. Mr. Malsky, Mr. McGinn/Offered every year

MUSC230 Senior Tutorial in Music History

Develops work (e.g., a paper, composition or performance) in consultation with the instructor. For majors only. Prerequisite: instructor permission. Mr. Korstvedt/Offered every semester

MUSC240 Senior Tutorial in Composition

Develops work (e.g., a paper, composition or performance) in consultation with the instructor. For majors only. Prerequisite: instructor permission. Mr. McGinn/Offered every semester

MUSC250 Tutorial in Jazz Composition

Student writes original scores for performance by a workshop ensemble. Prerequisite: MUSC151 and permission of program director. Staff/Offered periodically

MUSC260 Senior Tutorial in Theory

Student develops work (e.g., a paper, composition or performance) in consultation with the instructor. For majors only. Prerequisite: instructor permission. Mr. McGinn, Mr. Malsky/Offered every semester

MUSC280 Private Instruction in Instruments and Voice (Honors Level)

Areas offered: same as MUSC180 above. Students enroll in MUSC280 for the final two semesters of the honors track, and a fell recital is required as the culminating project for those two semesters. Prerequisites: Four semesters of MUSC180. Staff/Offered every semester

MUSC290 Capstone Project

MUSC297 Honors

MUSC298 Internship

MUSC299 Directed Study

MUSC299 Sec. 2 Directed Study in Computer Music

SCREEN STUDIES

Program Faculty

Marcia Butzel, Ph.D. - *Director*
Stephanie F. Larrieux, Ph.D.

Adjunct Faculty

Marvin D'Lugo, Ph.D.
Walter Schatzberg, Ph.D.

Part-Time Faculty

Fred Simon, B.S.

Visiting Faculty

Kevin Anderson, Ph.D.

Program Overview

Clark offers one of the few undergraduate programs in the nation that specializes in screen studies, which deals with arts and artifacts of the moving two-dimensional image, usually combined with sound. It is concerned, in other words, with the study of film, television, video and evolving forms of digital visual media. The program offers both a major and a minor and stresses the importance of a liberal-arts background, for the screen arts touch upon and are affected by all sectors of contemporary culture and society. Screen studies provides a core of basic and advanced knowledge of the screen arts and media while encouraging students to explore diverse connections and influences, ranging from the visual arts, drama, literature and aesthetics to sociology, psychology, history and economics.

Nonmajors take screen studies courses to acquire knowledge that relates to their interests in other disciplines, to gain a better understanding of the roles film and television play in their everyday lives or to understand the importance of the screen media as cultural and artistic forms. Those considering careers in the screen arts or related areas usually major in screen studies. In addition to being of special benefit for those planning graduate study or a career in the communications fields, the major also may be of interest to those seeking a liberal-arts education that speaks directly to questions of contemporary life, culture and the arts. Students interested in film and video production may take the program's sequence of production courses and gain production experience through professional internships.

Undergraduate Requirements

Students majoring in screen studies enroll primarily in courses on the history, theory and criticism of film, television, and other forms of motion picture media. The major consists of 12 credits—with a minimum of nine credits in screen studies. For a course to provide credit toward the major, a letter grade of C or higher must be achieved.

Three courses are required without exception:

SCRN010 Introduction to Screen Arts (to be taken as early as possible)
SCRN107 Introduction to Video Production, or its equivalent
SCRN114 Writing About Film

One of three U.S. screen survey courses is required:

SCRN119 History of U.S. Film Until 1950
SCRN120 History of U.S. Film Since 1950
SCRN122 History of American Broadcasting and Electronic Media

One of two international screen survey courses is required:

SCRN121 International Cinema to 1968
SCRN125 International Cinema since 1968

One course focusing on a national or regional cinema is required:

SCRN224 World Cinema and Global Culture
SCRN246 Studies in Spanish Cinema
SCRN248 Studies in Latin American Cinema
SCRN249 Studies in Hispanic Cinema
SCRN252 Asian Cinemas
SCRN263 Topics in French Cinema

One course focusing on screen genres is required:

SCRN123 Factual Film and Television
SCRN130 Film Genre
SCRN131 Film Noir

One course focusing on the theoretical nature of screen arts is required:

SCRN240 Film Authors and Authorship
SCRN231 Film Theory
SCRN261 Critical Perspectives on TV Culture
SCRN284 Film as Narration
SCRN288 Gender and Film

One course that focuses on creativity relevant to the screen arts is required:

ARTS120 Introduction to Photography
ARTS121 Intermediate Photography
SCRN108 Screenwriting
SCRN145 Do-It-Yourself Media
SCRN160 Soundtracks
SCRN171 Storytelling through Video Production
SCRN214 Social and Cultural Documentary Production
TA112 The Creative Actor
TA120 Technical Theater
TA123 Design for Performance
TA125 Theatrical Design Projects
TA126 The Physical Theater
TA212 Actor as Thinker
TA230 Playwriting

One capstone course: SCRN290—variable topics.

Capstone courses require the completion of a major research project.

Two elective courses or credits that are relevant to the student's interests in screen studies.

These can be any two screen studies courses not already taken as requirements, internships, directed studies, honors thesis, transfer credits in screen fields from other schools that do not duplicate any of the students' courses at Clark, or any of the following visual and performing arts courses:

ARTH142 Art and the Experience of Modernity
ARTH143 Art from 1940 to 1970
ARTH144 Art Since 1970
ARTH243 Design in the 20th Century
ARTH245 Urban Art and Society in Jazz Age New York
ARTS120 Introduction to Photography
ARTS121 Intermediate Photography
ARTS200 Photography Projects
ARTS205 Eros and Thanatos
ARTS209 Introduction to Interactive Design
ARTS250 Photography Studio
ARTS254 Graphic Design Studio
MUSC010 Introduction to Music
MUSC011 Music as Culture
MUSC012 Pop Music in the USA
MUSC014 World Music
MUSC103 Twentieth-Century Music
MUSC110 Rudiments of Music
MUSC141 Computer Music
TA112 The Creative Actor
TA120 Technical Theater
TA123 Design for Performance
TA125 Theatrical Design Projects
TA126 The Physical Theater
TA127 Analysis of Theater Production
TA153 Modern Drama
TA205 The Play and its Stages
TA206 Languages of Theater
TA212 Actor as Thinker
TA219 Directing Seminar
TA225 Advanced Theatrical Design Projects
TA226 Advanced Production Projects
TA230 Playwriting

Honors Program

Students with a strong interest and commitment to advanced study in the program and who have completed at least six screen studies courses with at least a B+ average, may, with the program's approval, elect the honors sequence: one advanced topics capstone course and a one- or two-unit senior thesis. Students are expected to use the honors course to develop an extensive research project on some aspect of film history, criticism or theory selected with their major adviser. Students planning to go on to graduate work in screen studies are encouraged to apply for the honors sequence.

All students interested in the honors sequence must apply to the screen studies program director in the second semester of the junior year.

Screen Studies Minor

Requirements:

- SCRN010 Introduction to Screen Arts
- SCRN107 Introduction to Video Production
- SCRN114 Writing About Film: Critical Approaches
- One screen history course selected from SCRN119, 120, 121, 122 or 125
- One course on a national cinema such as SCRN224, 246, 248, 249, 252 or 263
- One 200-level elective in screen studies chosen in consultation with a program adviser

Courses

SCRN010 Introduction to Screen Arts

Introduction to film and related screen media, with emphasis on critical thought and analysis. The course begins with attention to aspects of filmmaking activities — such as cinematography, editing and sound — then explores more contextual screen areas such as art film traditions, screen genres, auteur theory, gender and representation, etc. Students actively analyze films in detail to foster an understanding of screen styles and meanings. Fulfills prerequisites for advanced screen studies courses. Staff/Offered every semester

SCRN107 Introduction to Video Production

An introduction to the skills and technology required for video production. Each student will conceptualize, design, shoot and edit three video projects (individual and collaborative). The course explores both the art and craft of moving image production; and there is a strong emphasis on the creation of imaginative and personal work. No prerequisites; open to nonmajors. Mr. Simon/Offered every semester

SCRN108 Introduction to Screenwriting

See English 108.

SCRN114 Writing About Film

Considers a variety of critical methods for the analysis and interpretation of film. The course considers several important kinds of writing about film, including journalistic film criticism and analysis based in film theory. Students actively practice all of these modes of writing to acquire the analytic skills used in upper-level courses. The major critical approaches or methodologies of film studies such as formalist criticism, genre criticism, auteur criticism and forms of ideological criticism are explored in coordination with weekly films. Prerequisite: SCRN010 or permission.

SCRN119 History of U.S. Film until 1950

The history of the emergence and entrenchment of the Hollywood studio production system and the consolidation of a style of filmmaking now described as the classical Hollywood cinema. Topics to be covered include silent filmmaking, the emergence of the star system, feature-length narrative filmmaking and film genres, the disruption of the coming of sound, the impact of the Depression and two World Wars, and the start of Hollywood's golden era. Staff/Offered every other year

SCRN120 History of U.S. Film Since 1950

The history of post-WWII American cinema is the story of an ongoing series of adjustments to (or developments within the context of) instability in postwar film business: film noir, 3-D, biblical epics, blockbusters, art film influences, "new blood" from TV and film schools, Black filmmaking, revisionist genre films, high-concept filmmaking, etc. Further complicating this process of adjustments, cinema was overlaid onto, and consequently influenced by, the political turmoil within American society in general: the "Red Scare," the Vietnam War, the emergence of a mass counterculture, the antiwar movement, Watergate, Reaganomics, the end of the Cold War and increasingly vocal demands by women and minorities for social equality (and media representation). Staff/Offered every other year

SCRN121 International Cinema to 1968

Broad survey designed to acquaint students with major foreign movements in cinema history. Includes readings on and screenings of examples selected from Italian silent epics, French Impressionism, German Expressionist and Weimar cinema, Soviet montage school, Soviet socialist realism, British documentary school, Nazi cinema, Italian neorealism, Japanese classical cinema and French New Wave. Ms. Butzel/Offered every year

SCRN122 History of American Broadcasting and Electronic Media

This course considers how broadcasting and electronic media have been developed over the past century. We will examine the technical achievements of the field as well as its social and aesthetic impacts from early electrical and wireless communication (telephone, radio) to mid-century inventions (television, satellites) and more recent innovations (cable, digital technology). We will sample a wide range of media productions, including early radio and TV shows, documentaries and current media phenomena. Students will do some of their own historical research on broadcasting to supplement the course material. Staff/Offered every other year

SCRN123 Factual Film and Televison

An overview of film and television genres associated with factual and documentary filmmaking. A wide array of documentaries are used to examine sociocultural topics, such as art, gender, modernity and race. Focuses particularly on how certain stylistic means of filmmaking shape our understanding of subject matter and themes. Recent experiments with cinema, such as performativity, surrealism and reenactment — that blur the line between fiction and fact — will also be addressed. Mr. Anderson/Offered every year

SCRN124 International Cinema Since 1968

Surveys major developments in contemporary international cinema, emphasizing both historical explanation and critical interpretation of particular films and broader film trends. Begins with 1960s politically critical filmmaking in the developing countries of Latin America, Africa and Asia, and in the Soviet bloc countries. Aesthetic and industry trends in European and Asian art cinemas of the 1970s and 1980s are also considered, including the New German cinema movement, pan-European "quality" films, Parallel Cinema in India, and the Hong Kong New Wave. The concept of "national cinema" is investigated throughout the course, most explicitly when we study China's Fifth Generation filmmakers and 1990s Japanese cinema. Ms. Butzel/Offered every other year

SCRN130 Film Genre

Devoted to the study of the major storytelling formats into which much narrative filmmaking (especially that of the American cinema) may be categorized. The course considers theoretical perspectives, formal description, historical background and social implications of genres such as the western, gangster film, musical, melodrama, etc., and through this work enables students to engage in and experience the interpretive insights of this critical perspective on the cinema. This course is taught as a variable topic, and may be offered as either an overview of several film genres or as a course concentrating on intensive study of a particular genre. Staff/Offered every other year

SCRN140 Film Authors and Authorship

Examines the theory and practice of film authorship through a consideration of works by major American and international film authors. Studies historical development of the idea of film directors as authors in Europe and the United States. Emphasizes the impact of such theories on the study of various American figures, which may include Hawks, Ford, Hitchcock and Coppola, as well as international figures. Also examines the formation of film authorship in emerging cultural contexts, such as women's cinema and new national cinemas. Staff/Offered every other year

SCRN145 Do-It-Yourself Media

See Communication and Culture 145.

SCRN160 Soundtracks/Lecture

See Music 160.

SCRN168 Image Theory

See Communication and Culture 168.

SCRN171 Storytelling through Video: Documentary and Dramatic Production

Students will produce one or two "storytelling" videos. While they must create at least one individual work, they may choose to work collaboratively on a second project. There will be a strong emphasis on creating stories that explore experimental and innovative approaches and tell personal stories that transcend and cross traditional video storytelling genres of simple fiction and documentary. Preproduction, production and editing will be done outside of class. During class, students will view and critique their own videos as projects evolve, explore relevant production techniques and view and discuss professional films and videos that emphasize innovative approaches. They will also keep journals chronicling the evolution of their projects. Prerequisites are SCRN107 and competence in production and editing (a working knowledge of Final Cut Pro editing software is required). Mr. Simon/ Offered periodically

SCRN214 Social and Cultural Issue Documentary

An advanced workshop in documentary production. Using digital video technology, students will design, produce, and edit three short documentaries on contemporary social or cultural issues. Student films will be viewed and critiqued in class. Critical viewing and class discussions will identify and analyze the elements of effective nonfiction storytelling, and will explore realities and decisions faced by documentary filmmakers, e.g., point of view, objectivity, voice and the ethical dilemmas often confronted by the documentary filmmaker. To take this course, a student must be proficient in the basic skills of production. Prerequisite: SCRN107 or ARTS107 or TA107 or COMM107 or permission. Mr. Simon/Offered every other year

SCRN224 World Cinema and Global Culture

A course on contemporary film since the 1960s in an international context. World cinema mediates the social, psychological, political and economic concerns of people experiencing the effects of colonialism, war and globalization. World cinema is also often defined in opposition to Hollywood cinema, in terms of three principal trends: art cinema, Third cinema and a "new internationalism" (referring to transnational and diaspora themes in films, changing modes of film production, and digital convergence in technology). The course will examine each of these trends as it has evolved over time and also consider the effect of globalization on Hollywood. Readings will be diverse and include film history, interpretations of individual films, cultural theory, and some cultural policy analysis. Ms. Butzel/Offered annually

SCRN231 Film Theory

This seminar examines a wide range of theories regarding motion picture reception, and to a lesser extent, production. Topics will include classic arguments about the aesthetic purpose of film and the place of authorship in screen texts, as well as more contemporary concerns such as queer theory, cognitivism and post-structuralism. The course will also take up the anti-theory movement that has arisen in recent years. Staff/Offered every other year

SCRN246 Studies in Spanish Cinema/Lecture, Discussion

See Spanish 246.

SCRN248 Studies in Latin American Cinema/Lecture, Discussion

See Spanish 248.

SCRN249 Studies in Hispanic Cinema/Lecture

See Spanish 249.

SCRN252 Asian Cinemas

How different was/is the Asian cinema from the classical Hollywood cinema, which has dominated the world's commercial filmmaking as a model to be either imitated or resisted? The course addresses the issue of difference "from the outside" by engaging in the study of the history of various Asian film industries; identification of the characteristic storytelling formats of Asian cinema; formal analysis of the stylistic signatures of its master directors (such as Kurosawa, Ozu, Ray, Yimou, Woo); and study of Western criticism's discourse on these national cinemas. Staff/Offered periodically

SCRN261 Critical Perspectives on Television

Pursues fundamental questions about television through the complex mechanisms of contemporary criticism and popular culture. To understand how television functions, for instance, you must understand certain aspects of its mechanics, economics and politics. To understand what television means to people, we confront a matrix of even more varied human dimensions, which are more difficult to identify. How is television studied? How is meaning created through the audio/visual domain of television? How does that meaning come to be popular? What is at stake in the production and consumption of television? Staff/Offered every other year

SCRN262 Studies in 19th-Century British Literature/Seminar

See English 262.

SCRN263 Studies in French Cinema

French cinema has been an especially successful European cinema for over a century. It has defined film as an art form and as a major site of national cultural production. Distinctive films can be found in every historical period, from the earliest "cinema of attractions" to today's auteur films and popular genre movies. Of the major world cinemas, French cinema has also been the most successfully nationalist: the French government has supported the industry, critics and policymakers have campaigned against Hollywood dominance, and filmmakers have been active in local and global politics. The focus of the course varies each time it is given. We may examine a particular filmmaker, movement or arts tradition, a genre or comparison of genres, or a particular theme such as immigration, the representation of history or sexual explicitness in recent films. Taught in English. Prerequisite: SCRN010 or permission. Ms. Butzel/Offered every other year

SCRN284 Film as Narration

Explores the relationship between storytelling and cinema, from the perspectives of filmmaking craft, critical analysis, film history, the psychology of the spectator and sociopolitical factors. Students acquire vocabulary and concepts to analyze fictional and factual narratives ranging from early-American shorts to contemporary international features. Some consideration will also be given to television series and to interactive digital media as narrative. Specific topics covered include: narrative and nonnarrative sources of films; literary and filmic versions of the detective story; D.W. Griffith and the development of the integrated narrative film; serials and series, sequels and remakes; "assertive" versus "invisible" modes of narration; oral cultural tradition and film. Prerequisite: SCRN010 and 114 or permission. Ms. Butzel/Offered every other year

SCRN288 Gender and Film

Explores the ways that gender is produced by the "social technologies" of film and video. Examines concepts of sexual difference (masculinity and femininity) and organizing representation, narrative and spectatorship in Hollywood and alternative cinemas, and in some television and video. Readings will be primarily theoretical and critical. Ms. Butzel/Offered every other year

SCRN290 Capstone Course

ReViewing Disney: Race, Class and Gender in the Animated Feature Film: This seminar critically examines the Walt Disney animated feature film through the socially constructed lenses of race, class and gender. In analyzing the social values cultivated and endorsed by Disney and greater American society, this course observes how social prespectives and history have transformed these values over time. The ultimate goal of the course is to address the question, "What is American about Disney?" This course uses theoretical, cultural studies, and industrial historical scholarship to contextualize close readings of select films. Screenings inside and outside of class are required. There is an emphasis on reading and writing in this course. Prerequisite: SCRN010 or permission. Ms. Larrieux/Offered every year

SCRN291 Capstone Course

The Cinematic Body: This course examines cinematic portrayals of the body and how it is represented in various film forms (fiction, nonfiction, avant-garde) throughout history and in different societies. We will simultaneously study the different ways in which the body is characterized in film according to different cultural and historical standards and ideals. In addition to surveying ancient, classical and modern imagery, we'll explore a variety of themes and critical theories relating to such topics as masculinity, eroticism, social bodies and cyborgs, drawing from the fields of cinema studies, communication studies, anthropology, art history, media studies and science. Some of the films we will analyze include "Bend it Like Beckham" (England), "Divine Horsemen" (Haiti), "Innocence" (France) and "Blade Runner" (USA). Students will emerge from this course with a clearer understanding about different cultural and historical representations of the body, in light of social, economic, political, as well as artistic and aesthetic influences. Prerequisite: SCRN010 or permission. Mr. Anderson/ Offered every year

SCRN297 Honors

SCRN298 Internship

SCRN299 Directed Study

STUDIO ART

Program Faculty

Elli Crocker, M.F.A. - *Director*
Sarah Buie, M.F.A.
Sarah Walker, M.F.A.

Part-Time Faculty

Frank Armstrong, B.J.
Valerie Claff, M.F.A.
Stephen DiRado, B.F.A.
Kirk Jalbert, M.F.A.
Timothy Murdoch, M.F.A.
Deirdre Ni Chonaill, B.Design
Fred Simon, B.S.
Gregory Thielker, M.F.A.
Marguerite White, M.F.A.
Cynthia Wilson, M.B.A.

Visiting Faculty

Jennifer Hilton, M.A.

Emeriti Faculty

Donald W. Krueger, M.F.A.

Program Overview

Studio art courses offer students an opportunity to engage in the study and practice of visual language. The learning of artistic methods and media is embedded in intellectual inquiry and critical analysis, so that the study of studio art serves as a meaningful focus of a liberal-arts education. Art is seen as a means of communicating human experience; therefore students learn to "read" images and to visually represent their own ideas. Areas of specialization within studio art include drawing, painting, graphic design, photography, printmaking, sculpture and video production, as well as interdisciplinary work within the major or between studio art and other academic disciplines. In addition to course offerings, students may participate in internships for credit on or off campus. There are also regular exhibitions of contemporary art on campus, course-related field trips to museums and galleries, and artist lectures. Some additional art courses may be taken through COPACE for credit toward the major.

Undergraduate Requirements

The major normally consists of 14 courses: 11 studio courses and three art history courses. The western survey art history course (ARTH010) must be one of the three art history courses. ARTS100 and 102 are studio foundations designed to introduce students to the nature of visual language and the creative process while encouraging the development of visual expression. At least one of these courses is required of majors and is strongly recommended for nonmajors as preparation for additional work in studio art. In addition to these foundation courses, a number of other introductory level courses in various media (painting, sculpture, printmaking and graphic design) satisfy the aesthetic perspective requirement. As the aesthetic perspective outlines, "artistic expression and the perception, analysis and evaluation of aesthetic form" in fundamental terms will be the focus of these classes. After exploring various media, students may choose to concentrate in one area and often seek out particular faculty members for personal mentoring. With the approval of the faculty adviser, credits towards the major may include courses in music, theater arts and screen studies, as well as student initiated nontraditional experiences. If a student chooses to double major, eight studio art courses and two art history courses are required, one of which must be ARTH010.

Capstone for Majors

Studio art majors will undertake work at an advanced level in at least one medium. Courses that satisfy this level of work are: ARTS254 Graphic Design Studio, ARTS258 Printmaking Workshop, ARTS266 Sculpture Studio, ARTS200 Photography Projects (also offered through COPACE), ARTS214 Social and Cultural Issues Documentary (Screen Studies), ARTS280 Advanced Studio in Painting/Drawing and/or ARTS234 Studio Topics. Studio Topics is interdiciplinary (students work in a variety of media) and provides a thematic context for the making of art. The class examines current topics occupying the national imagination as well as timeless themes that artists continue to address. Some individual studio space will be available to senior art majors while enrolled in ARTS234, 280 and 289.

Honors Program

Students with a strong commitment to intensive study and departmental approval can elect to undertake an honors project, 289 Senior Thesis, which culminates in an exhibition of work in the Clark University gallery. Entrance into the Senior Thesis class is competitive. Students must submit work completed in an advanced-level course for review by a faculty panel at the end of the fall semester and must have a combined GPA of 3.0 in their art classes. Participation in this class is not a guarantee that the student will receive Honors. This decision is made by a committee of faculty after the work is presented and reviewed. The honors project also includes a 5-8 page paper explicating the artistic process and content of the project. Credit is given for course work completed even if a project is not recommended for honors.

Courses

ARTS100 VISUAL STUDIES: 2D DESIGN AND COLOR/STUDIO, LECTURE, DISCUSSION

Considers visual perception and visual problem-solving/figure-field relationships, two-dimensional pattern and form, and theory and dynamics of color. Each semester, section one (Basic Design) will be a project-based class exploring design elements and principles. Section two (Pathway of the Senses) will emphasize a more intuitive and sensory approach to design basics, exploring sound, poetry, landscape and memory as inspiration. Open to nonmajors. Fulfills the Aesthetic Perspective. Ms. Claff/Offered every year

ARTS101 IMAGING THE COSMOS: DRAWING THE WORLD FROM MICRO TO MACRO

Using the world as a cabinet of curiosities, we will look closely at natural phenomena at all scales of magnification. For our studies we will use structures and dynamic processes found in microbes, fossils, botanical specimens, human and animal anatomy, wind, water, clouds, storms and stars. We will draw with a combination of simple materials such as pencil, pen and ink, pastel as well as more advanced technologies such as opaque projector, camera, microscope and the computer. In addition to studying objects, we will also encounter and explore various ways of envisioning the natural world that were used in different eras from Renaissance Wunderkammer to the 19th-century passion for naturalist explorations, to new imaging technologies used in weather prediction and space exploration. Study references will include the works by artists studying nature who lived from the Renaissance onward, notably Leonardo, Ernst Haeckel, Karl Blossfeldt,Vija Celmins, Gregory Crewdson and Stephen DiRado as well as scientific illustration of natural phenomena as seen through microscopes, telescopes and computer imaging. Fulfills the Aesthetic Perspective. Ms. Walker/Offered periodically

ARTS102 VISUAL STUDIES: DRAWING—STRUCTURE AND PROCESS/STUDIO, LECTURE, DISCUSSION

Addresses the mechanics and expressive potential of drawing. Traditional illusionist drawing techniques will be combined with exercises that facilitate personal expression and subjective response. In exploring the relationship among seeing, thinking and making, the beginning student will acquire fundamental skills in image making and insight into the creative process in general. Each faculty member will bring his/her unique perspective and personal studio practices to bear in the teaching of this course. Fulfills the Aesthetic Perspective. Ms. Crocker, Ms. Walker, or visiting faculty/Offered every year

ARTS107 INTRODUCTION TO VIDEO PRODUCTION

See Screen Studies 107.

ARTS120 INTRODUCTION TO PHOTOGRAPHY/STUDIO, LECTURE, DISCUSSION

Introduction to black-and-white photography emphasizing the zone system and including camera operation, developing, printing and finishing techniques. Students must have a variable-setting 35 mm camera with a built-in or hand-held exposure meter and must provide their own film and paper. Open to nonmajors. Mr. DiRado, Mr. Armstrong, Mr. Jalbert/Offered every semester

ARTS121 Intermediate Photography/Studio, Lecture, Discussion
Continues the refinement of photographic seeing through darkroom techniques, digital imaging and alternative processes. We will consider a broad spectrum of aesthetic, formal and conceptual issues in the field of fine-art photography, while students will be encouraged to develop a personal vision. Some reading and writing required, as is a field trip. Students will meet weekly for critiques and lectures, concluding the semester with a comprehensive portfolio. Open to nonmajors. Prerequisite: ARTS120 or acceptable portfolio with instructor permission. Mr. DiRado/Offered every year

ARTS122 Introduction to Digital Photography
With the rapidly advancing digital processes replacing the medium of color photography, the fall session of this course will concentrate on digital capture and through-put to fine-art pigment-based ink prints in a studio environment. Basics of shooting digitally and working with the image through Adobe Photoshop will be covered extensively, as well as the integration of other studio disciplines into this process. Mr. Armstrong/Offered every year

ARTS123 Design for Performance/Studio, Tutorial
See Theater Arts 123.

ARTS124 Introduction to Graphic Design/Studio, Lecture, Discussion
Introduction to the language, process and potential of graphic design as communication. Exercises and applied problems emphasize the relationship between form and meaning, typography, image making and conceptual development. Fulfills the Aesthetic Perspective. Ms. Buie and Ms. Wilson/Offered every year

ARTS125 Graphic Design Projects/Studio, Lecture, Discussion
Intermediate-level projects in graphic design, with reference to particular design media such as books, identity, maps, exhibit design, Web sites, etc. Emphasis on exploring conceptual development and the problem-solving process. (Knowledge of Mac-based page-layout programs is helpful, but not required.) Prerequisite: ARTS124 or permission of the instructor. Ms. Wilson/Offered every year

ARTS126 The Physical Theater/Environmental Studio/Studio, Tutorial
See Theater Arts 126.

ARTS127 Analysis of Theater Production/Seminar
See Theater Arts 127.

ARTS128 Drawing: Sense of Place
Students will engage the environment of Worcester by drawing on site at a variety of locations, from abandoned factories to Victorian parks, a littered railbed to a wooded Quaker cemetery. By actively looking, we will forge a connection to this city, while recognizing other relationships to place—including the archetypal places we carry or inhabit within ourselves. The emphasis will be on learning how to see where we are and to be more fully aware of how this relationship to place defines us. Globalization, Internet intimacy, easy mobility and politics may all influence our understanding and feelings about place, but there is perhaps nothing so immediate and illuminating as the act of simply perceiving and translating the world around us. Artists who have referenced or manipulated "place" in their work will also be studied. Fulfills the Aesthetic Perspective. Ms. Crocker/Offered periodically

ARTS129 Drawing: The Body/Studio, Lecture, Discussion
Focuses on the human form through various drawing methods, with analysis of the structure and anatomy of the body, as well as exploration of the expressive potential and symbolic associations of the human figure. Ms. Crocker/Offered every year

ARTS132 Painting I/Studio, Lecture, Discussion

Seeing and Believing/Ms. Crocker: Emphasis on representational painting strategies. Introduces the fundamentals of craft and explores the synthetic possibilities of paint, while discussing the conceptual basis for this medium (Why paint?). Focuses on material—both the materials employed by the painter, and the materials the painter simulates. Painting as a vehicle for thinking and communication will be stressed.

Self-Made Worlds/Ms. Walker: Emphasis on constructing alternative realities. The painted image has been with us since the first handprint appeared on a cave wall. It remains an intimate and powerful index of an individual's quest for self-expression, and acts as a mirror of culture's changing image of itself. The basic toolbox of painting techniques will be explored along with an introduction to painters and painting concerns from the past through to the contemporary moment. The emphasis of this course will shift depending on the professor. ARTS102 Visual Studies: Drawing or its equivalent is highly recommended. Fulfills the Aesthetic Perspective. Offered every year

ARTS133 Painting II/Studio, Lecture, Discussion

Beyond the Surface/Ms. Crocker: Emphasis on representational painting, but we will also strive to see beyond the appearance of things. This course will continue an exploration of painting techniques including more experimental media and approaches to the depiction of form and space on a two-dimensional surface. The game of illusion in trompe l'oeil will challenge the student as will the metaphysics of apprehending the physical world. Can the invisible be made visible?

States of Being/Ms. Walker: After a basic introduction to painting, one can experience more elaborate and personal directions within the medium. Ms. Walker will look at alternative notions of space and states of being such as micro/macro, dream and psychological states, as well as cyberspace. Painting II again taught from varying perspectives based on the studio work of each professor. ARTS102 and 132 recommended. Offered every year.

ARTS136 Introduction to Sculpture/Studio, Lecture, Discussion
The basic premise of this sculpture course is to acquaint the student with the formal aspects of aesthetic objects. The semester will begin in low relief and work progressively towards fully realized three-dimensional objects. Along the way we will build fundamental skills, working with hand tools, some power tools and building a vocabulary to establish a solid foundation in the conceptual process of making sculpture. Open to nonmajors. Fulfills the Aesthetic Perspective. Mr. Murdoch/Offered every year

ARTS137 Sculpture Projects/Studio, Lecture, Discussion
Intermediate course focused on contemporary issues of sculpture and objects in a spatial environment. As the semester progresses we will move from solid form to space and environment. This class will look closely at some of the most current artists and their projects. We will examine the world around us and discover how objects and people interact and the meaning described by this interaction. Open to nonmajors. ARTS136 recommended. Mr. Murdoch/Offered ever year

ARTS158 PRINTMAKING I/STUDIO, LECTURE, DISCUSSION
A survey of printmaking techniques and aesthetics including relief and intaglio printing, linoleum cuts, etching methods using metal plates, and collagraph prints. Open to nonmajors. Fulfills Aesthetic Perspective. Ms. Hilton/Offered every year

ARTS161 PRINTMAKING II: EXPERIMENTAL MEDIA/STUDIO, LECTURE, DISCUSSION
A further investigation into the diverse materials of printmaking. Relief, serigraphs, collagraphs, monotype, and intaglio methods will be used to gain a richer knowledge of the medium. Open to all students. Ms. Hilton/Offered every year

ARTS162 EXPLORING THE NATURAL WORLD: SEEDING ARTISTIC PROCESS WITH DRAWING, MONOTYPE AND MIXED MEDIA
This class explores the natural world as visual model and studies organic process as a metaphor for artistic process. With close observation of Nature's forms and structures, students sharpen their eyes and experiment with different field-drawing techniques. Numerous drawing expeditions produce a collection of images to use as seeds for finished drawings and prints. Students are encouraged to experiment with a variety of materials and create an individual final project in one or more of the media covered. Prerequisite: one of the following—ARTS100, 102, 128, 129 or instructor permission. Ms. Claff/Offered every year

ARTS171 STORYTELLING THROUGH VIDEO: DOCUMENTARY AND DRAMATIC PRODUCTION
See Screen Studies 171.

ARTS174 COLLAGE AND MIXED MEDIA: FROM HIGH TO LOW/STUDIO, LECTURE, DISCUSSION
This course offers an exploration of the ways materials and ideas can be transformed using approaches in both high and low technologies. By looking closely at how artists of the 20th century, and especially of the last few years, have made dynamic artwork from tools, methods and materials as diverse as trash, the computer, stencils, projection, layering processes, make-up and food, students will become familiar with current movements, directions and attitudes in art. This course will build on already existing studio-art skills and propel one to think and create more expansively using a larger toolbox. Ms. Walker/Offered periodically

ARTS182 TECHNICAL THEATER/STUDIO, LECTURE
See Theater Arts 120.

ARTS185 THEATRICAL DESIGN PROJECTS/STUDIO, TUTORIAL
See Theater Arts 125.

ARTS200 PHOTOGRAPHY PROJECTS/STUDIO, LECTURE, DISCUSSION
Continues the study of the techniques and aesthetics of black-and-white photography. Students have the opportunity to pursue individual photographic projects in the size and format of their choice. Open to nonmajors. Prerequisite: ARTS120 and/or 121. Mr. DiRado, Staff/Offered periodically

ARTS204 SACRED SPACE/LECTURE, DISCUSSION, PROJECTS
Explores traditional and contemporary experiences of the sacred in spatial terms—through study of spatial and natural archetypes (i.e., mandala, threshold, cave, mountain); geometric harmonies in nature, art and architecture; sacred and secular architectural forms (temple, stupa, shrine, indigenous village architecture); geomancy or the relationship between built and natural environments; and ancient and contemporary expressions of the natural world as Gaia, manitou or sacred geography. Ms. Buie/Offered every year

ARTS205 EROS AND THANATOS/SEMINAR, DISCUSSION, PROJECTS
An interdisciplinary seminar exploring the nature of the life-energy we call eros and its relationship to thanatos, or death, with an emphasis on deepening our understanding of our relationship to the natural world. Ms. Buie and Mr. Wright/Offered in alternate years

ARTS208 TYPOGRAPHY
Study of the informational and expressive dimensions of typographical language. The history and technology of type is considered, with an opportunity to handset metal type, as well as do extensive work on the computer. Applications to a variety of problems, including letterhead, poster and publication design. Prerequisites ARTS124 and/or 125, or permission of instructor. Ms. Buie/Offered every year

ARTS209 INTRODUCTION TO INTERACTIVE DESIGN
Explores the basic principles of interactive design and development for the computer screen and the Web in general, through lectures, critiques, workshops and assignments. Staff/Offered every year

ARTS225 ADVANCED THEATRICAL DESIGN PROJECTS
See Theater Arts 225.

ARTS226 ADVANCED PRODUCTION PROJECTS
See Theater Arts 226.

ARTS234 STUDIO TOPICS/CAPSTONE, CRITIQUE, DISCUSSION, PROJECTS
Students will create significant individual works within a peer group framed by contemporary topics that vary each fall. This interdisciplinary course is structured as a seminar and requires extensive student participation in discussions, as well as independent creative work in a chosen medium. Topics will revolve around both timeless and highly contemporary issues confronting the artist in the making of his/her work. Will involve readings and some writing. Majors only and must have taken at least seven studio art classes. Ms. Buie, Ms. Crocker, Ms. Walker/Offered every year

ARTS250 DIGITAL IMAGING
The structure of this course will be designed around working artistically within a computer-assisted studio environment. This implies those skills necessary to complete the digital cycle of input, editing and output and includes learning how to use various scanners, Adobe Photoshop, and printers to accomplish a variety of aesthetic looks. The integration of other studios into this process will be stressed via a series of workshops in the photography darkroom, the printmaking studio, etc. These workshops are intended to create an open forum in which the student can feel free to incorporate various creative skills into the digital-imaging process. This course is also intended as a venue for discussing the history, current practices, and social values of digital creativity in its various forms. These discussions will revolve around course readings designed to articulate concepts relative to computer-based artistic practices. Basic knowledge of traditional photographic process helpful. Digital camera of 5-mega-pixels suggested. Mr. Jalbert/Offered every year

ARTS254 GRAPHIC DESIGN STUDIO
Advanced applied problems involving the role of designers in professional practice, working with clients and organizations. Consideration of the role of and opportunities for design in meeting communication needs. Prerequisites: ARTS124, ARTS125 and ARTS208, or permission of the instructor. Ms. Buie/Offered every year

ARTS258 Printmaking Workshop: Artist Books/Studio, Discussion
Students will refine technical ability in printmaking, sharpen critical-thinking abilities and develop a personal iconography. Independent work and thematic progression is encouraged. Prerequisite: appropriate beginning/intermediate studio art courses or instructor permission. Ms. Hilton/Offered every year

ARTS266 Sculpture Studio
Catering to the particular needs of the individual student, this course is structured to mentor, as well as focus on a course of study. Assignments are student directed, through class critique and one-on-one dialogue, students will present projects and gain feedback from the group. This course is designed to help the student find his or her personal voice working in sculptural form. May be taken for credit more than once. Prerequisite: appropriate sculpture experience and instructor permission. Mr. Murdoch/Offered periodically

ARTS270 Printmaking Studio
Professionally oriented, individual study in printmaking. May be taken for credit more than once. Prerequisite: ARTS158 or ARTS161 or ARTS258 or instructor permission. Ms. Hilton/Offered every year

ARTS280 Advanced Studio in Painting and Drawing
Advanced work in various 2-D media. Students will be encouraged to develop personal iconography and content, refine technique, and expand awareness of the relationship of their work to the larger world. This class will not be assignment-driven, but will enable the serious student to engage in focused work, serial studies, and autonomous investigation under the guidance of a faculty mentor. Ms. Crocker, Ms. Walker, or visiting faculty/Offered occasionally

ARTS289 Senior Thesis
Advanced seminar for studio art majors in any concentration. Working independently, but in close consultation with the instructor and interaction with the class peer group, the student will prepare a cohesive and mature body of work to be presented in a group exhibition in the University Gallery and to a faculty committee with oral and written support to be considered for honors. This work should demonstrate original thinking and a high level of technical mastery. Prerequisite: ARTS234 or instructor permission. Ms. Crocker, Ms. Walker/Offered every year

ARTS297 Honors

ARTS298 Internship

ARTS299 Directed Study

SCRN214 Social and Cultural Issue Documentary
See Screen Studies 214.

THEATER ARTS

Program Faculty

Gino DiIorio, M.F.A. - *Director*
Raymond Munro, M.A.H.

Adjunct Faculty

Paul Burke, Ph.D.
Michael Spingler, Ph.D.
Virginia Mason Vaughan, Ph.D.

Part-Time Faculty

Debra Bluth, M.F.A.
Angela Brazil, M.F.A.
Yvonne Conybeare, M.F.A.
Diane Hovenesian, B.A., C.A.T.
Catherine Quick Spingler, M.A.
Christine Weinrobe, B.F.A.

Program Overview

At the core of the theater program is the strong belief that a liberal-arts education is inherently inseparable to the artist's process. This relationship provides a cornerstone for the practice and study of theater, as theater by its very nature is a multidisciplined art form. The theater program is designed to attain a balance between a strong liberal-arts education and intensive study in the student's chosen area of focus.

The program places a strong emphasis on performance as a teaching tool for students at many different levels of work. Each semester, the program presents professionally directed productions of classic and contemporary theater. There are also opportunities to act and direct in student sponsored classes, workshops and productions. Theater productions are open to all Clark students. The program is designed to meet the needs of the major who may eventually wish to pursue a professional career in theater, as well as the nonmajor, who may simply want to gain a greater understanding of the play or the performance process.

The Center for Contemporary Performance is a scholarly community of directors, composers, playwrights, choreographers, film/video makers and critics devoted to the creation, development and publication of contemporary works of art. The center is designed to enhance the academic work of the University by organizing and focusing advanced learning through seminars and directed study in music, theater, film, design, literature and aesthetics. The center enables students and faculty to work with visiting artists and outside performance groups, thereby enriching their educational experience and the creative process. Advanced students are encouraged to develop creative and theoretical projects to take advantage of the critical evaluation and supervision available through the Center for Contemporary Performance.

The theater arts major is designed to offer an interdisciplinary framework that serves as foundation for the student to enter their primary area of expertise. Once the basic course requirements have been fulfilled, there is a great deal of flexibility in developing a program well suited to the individual needs and interests of the student. The faculty takes a proactive role in the design of this program, preparing the student to enter their chosen field or next level of study.

Undergraduate Requirements

The major consists of 13 courses: five core courses, five specialty courses (focusing on the student's area of expertise and interest), and three related courses (chosen to complement the student's professional program). The five core courses are required of all majors. Majors may specialize in acting, directing, technical theater, theatrical dramatic criticism and playwriting, as well student-initiated areas of study and focus. Students may also major in theater with an emphasis on literature and dramatic criticism. Related visual and performing arts courses are to be chosen in consultation with an adviser.

Required of all majors:

1. Core Courses

TA112 The Creative Actor
TA120 Basic Technical Theater
TA153 Modern Drama
TA144 Drama of the Western Tradition
TA212 Actor as Thinker

2. Specialty Courses

Five theater arts courses specializing in a single area (acting, directing, technical theater, dramatic criticism, theatrical design, playwriting). At least two of these courses must be at the 200 level.

3. Related Courses

A set of three courses in the visual and performing arts outside of theater (i.e. screen studies, art history, studio art and/or music). These courses must be picked in consultation with the student's adviser.

Honors Program

Students with distinguished academic records who wish to take honors in theater arts should consult the program director early in their junior year to identify a project of interest and choose an honors adviser. The student is expected to use the honors program to develop an independent work, which displays their skills and capabilities in their chosen field. This can take the form of writing a play, performing a role, etc., with an emphasis on attaining a professional standard of work. The thesis must be performed and/or presented as a senior and will be reviewed by a faculty panel.

Theater Arts Minor

Requirements

TA112 The Creative Actor
TA212 Actor as Thinker
TA154 Modern Drama
TA144 Drama of the Western Tradition
TA120 Basic Technical Theater
Plus One Additional 200 Level Theater Course

Courses

TA012 How to Act Right—On and Off the Stage/First-Year Seminar

How to Act Right is primarily a basic acting course but with an added research component. The content of the course is presented and explored through lectures and exercises. The students take their newly informed grasp of the art of acting and working from their experience with dramatic structure, character development and improvisation they break into research teams and explore acting throughout their everyday life and culture. Some possible topics would include acting and Presidential politics, the acting process in undercover work, acting and role playing in psychology, and acting as metaphor in literature, philosophy and spiritual traditions. The training approach in the course is integral. Because acting demands that its practioners utilize all aspects of their beings, students will work to develop their many levels simultaneously, i.e. physically, emotionally, cognitively and spiritually. Fulfills the Aesthetic Perspective. Mr. Munro/Offered periodically

TA107 Introduction to Video Production

See Screen Studies 107.

TA108 Literature and Art of Revolt in Modern France/First-Year Seminar

See French 108.

TA109 Contemporary Women Playwrights

This course is designed to introduce the student to the works of major women playwrights of the past 100 years. While there is some focus on the early part of the 20th century, the primary study will be of plays written in the past 30 years. In studying the plays, a number of different points of view and reference will be considered including that of the playwright, actor, director, historian and dramaturge. The student is encouraged to formulate a personal opinion of these plays and dramatists. Mr. DiIorio/Offered biannually

TA111 Voice and Diction/Studio, Tutorial

An intensified phonetic approach to articulation and voice production with some emphasis on speech for the stage and for public occasions. Several laboratory sessions will be provided for individual coaching by the instructor. Staff/Offered every year

TA112 The Creative Actor/Studio

Through a series of workshops, the student becomes familiar with the basic tools necessary to the art of acting. The approach is based on the techniques of Stanislavski, Viola Spolin, Joseph Chaikin, Robert Cohen and original exercises, including an introduction to basic voice and movement for the actor. Limited to 25 students. Staff/Offered every semester

TA114 Introduction to Shakespeare/Lecture, Discussion

See English 120.

TA116 Movement for the Performing Artist: The Alexander Technique/Studio

The Alexander Technique is a mind/body teaching method that employs experiential learning. The course will focus on moving and thinking freely in the artistic process and everyday life. Students will learn how to recognize and change habits that cause unnecessary worry, tension and fatigue. Performance movement, public speaking and other activities will be used as ways for students to observe themselves in action. By understanding how they respond in activity, students will become adept at making choices, which will encourage their innate ability to work and perform with freedom and ease.
Ms. Hovenisian/Offered every year

TA119 Public Speaking/Studio

Students are required to make as many speeches as time permits, so that they may master the fundamentals of public speaking, including the most common situations: presentation of information and persuasive speaking. Ms. Hovenesian/Offered every year

TA120 Technical Theater/Studio, Lecture

Introduction to theatrical production. Techniques and organization involved in providing the stage with scenery, lights and properties. Introduces drafting, scaled ground plans, elements of design and styles of production. Makeup, lighting and set construction in applied lab/crew requirements. Ms. Weinrobe/Offered every semester

TA123 Design for Performance/Studio, Tutorial

Theory of design/function of visual artist in relationship to production, director or choreographer. Collaboration in and development of performance art. Historical research in styles of ornament and production. Drawing, painting and model building. Lab/crew assignments. Ms. Weinrobe/Offered periodically

TA125 Theatrical Design Projects/Studio, Tutorial

Intermediate-level projects in design and presentation techniques for theater productions. Work in areas of scenery, costume or lighting design. Prerequisite: TA120. Ms. Weinrobe/Offered periodically

TA126 The Physical Theater/Environmental Studio/Studio, Tutorial

Study of designed environment and structure as it relates to performance and the physical theater as well as contemporary installation projects. Study of public spaces, theater architecture and site-specific work. Ms. Weinrobe/Offered periodically

TA127 Analysis of Theater Production/Seminar

Examination of live theater productions through written and verbal criticism. Critical elements of the concept of production explored through assigned readings and the development of a production proposal/concept. Attendance required at scheduled evening and/or weekend performances in the Worcester/Boston area. A lab fee will be collected to pay for tickets and bus rental. Ms. Weinrobe/Offered periodically

TA130 Dance I: Modern Dance

Modern Dance is a studio course exploring creativity, designed to introduce beginning and intermediate dancers to the rudimentary principles of Modern Dance. The course incorporates movements with other disciplines, focusing not only on dance technique but also beginning choreography. Students meet once a week for three hours, participating in warm up and floor exercises, and making beginning dances. Ms. Bluth/Offered every other year

TA131 Modern Dance II: Choreography and Improvisation

This is a basic course in creating, composing and performing new dance works while emphasizing the diversity of techniques and methods available to the choreographer. The main focus of the course is dance composition. Students will explore and develop skills used in the dance making process, as well as learn skills of movement improvisation and partnering. Students will also learn to perceive and analyze dance composition by watching videos and writing reviews. The course meets once a week. Limited to 15 students. Prerequisite: TA130 or instructor permission. Ms. Bluth/Offered annually

TA132 Modern Repertory

In this class, students will make a piece of choreography from beginning to end, directed by the instructor. This piece will be performed informally at the end of the semester. The class will start with a group warm-up that will lead into a rehearsal, in which students will both learn material given to them by the instructor, and also create their own material to be used in the choreography. Permission of instructor required. Ms. Bluth

TA143 Terrible Beauty: The Art of Tragedy/Lecture, Discussion

See English 143.

TA144 Drama of the Western Tradition/Lecture, Discussion

See English 144.

TA150 The New German Cinema/Lecture, Discussion

See German 150.

TA153 Modern Drama/Lecture, Discussion

This is a course designed to introduce the student to the major dramatic writers from the 19th century to the present. In studying the plays, a number of different points of view and reference will be considered including that of the playwright, the actor, the director, the historian, the dramaturge. The student is encouraged to formulate a personal opinion of these plays and dramatists. The major focus of the course is [illegible] text and the student's understanding and interpretation of the work. However, a strong emphasis will also be placed on the performance aspect of these plays. This can take many forms, including coordination of our efforts with theatre classes on campus, field trips to theaters nearby, use of video, and even staged readings of the scripts in class. Fulfills the Verbal Expression requirement. You must have been placed at the Verbal Expression level to choose this seminar. Mr. DiIorio/Offered every year/First-Year Seminar

TA159 French Culture Seen Through Film: Jean Renoir/Lecture Discussion

See French 160.

TA169 Theater Workshop in French/Lecture, Discussion

See French 165.

TA170 The Comic Spirit in French Theater and Film/Lecture, Discussion

See French 170.

TA171 Storytelling through Video: Documentary and Dramatic Production

See Screen Studies 171.

TA204 Social and Cultural Issue Documentary

See Screen Studies 214.

TA205 The Play and its Stages/Seminar, Workshop

See Comparative Literature 205.

TA206 Languages of Theater/Seminar, Discussion

See Comparative Literature 206.

TA209 Writing Out Loud/Workshop

See English 209.

TA212 Actor as Thinker/Studio, Lecture, Discussion

A conceptual approach to acting theory and its application. Student develops a greater understanding of script analysis, characterization, style and the relationship of the actor to the audience. A basic course for all students who intend to continue in acting and directing, and a prerequisite for TA213 Studio and TA219 Directing Seminar. Prerequisite: TA112. Limited to 15 students. Mr. Munro/Offered every year

TA213 Studio

A scene-study course applying the methods, theories and approaches discussed in Actor as Thinker to working on stage, film and video. Students are required to present several scenes of different periods and styles for discussion, critical written review and further development by classmates and director. Content varies each time the course is taught. May be repeated for credit. Lab and crew hours are required. Prerequisite: TA212. Mr. Munro, Mr. DiIorio, Ms. Brazil/Offered every year

TA214 Shakespeare in Action/Studio

This acting course concentrates on the major works (Hamlet, Macbeth, Twelfth Night, Romeo and Juliet, etc.), giving the actor an introduction to Shakespeare. The actor is encouraged to maintain the same approach and techniques used in other scene work, while adding the challenge of verse and heightened language. The focus of the class is to take a Shakespearean play and create the illusion of the first-time performance. Mr. DiIorio/Offered periodically

TA215 Stage Combat

This class will offer an introduction to stage combat, a vocabulary, a process and a basis for safe exploration of violent action in theater. The first three weeks will be spent on hand-to-hand basics: shared weight improvisation, tumbling (the safe way to fall), learning moves, positions and reactions. The second three weeks will focus on learning the basics of weapons fighting. Using wooden dowels as weapons, we will cover the basics of footwork and hand positions in Staff fighting, Broadsword, Rapier and Dagger, and Small Sword. In latter classes, students will work on implementing techniques into a complete fight. Limited to 12 theater majors, nonmajors require permission. Staff/Offered every year

TA219 Directing Seminar

Introduces the principles of directing for the stage through theory, practical application and discussion. Students study problems of interpretation and concept; the role of the director as creative and interpretive artist; and relationship to designer, stage manager and actors. Additional lab time is required. Prerequisites: TA213 and instructor permission. Mr. Munro/Offered every year

TA225 Advanced Theatrical Design Projects

Advanced-level projects in design. May be repeated for credit. Prerequisite: instructor permission. Ms. Weinrobe

TA226 Advanced Production Projects

Introduces the business and practical execution of theater productions. Students learn techniques in organizing and managing different areas and departments. Requirements include participating in a supervisory position on a department show. Positions in outside theaters accepted for credit. Ms. Weinrobe

TA230 Playwriting

Students learn basic techniques of stagecraft including dialogue and character development, as well as dramatic structure and the technical elements of a play. Students will write every week and complete assignments to be read in class. Mr. DiIorio/Offered every year

TA235 Advanced Playwriting Workshop

This workshop is designed to facilitate the work of advanced playwrights and actors. Writers will develop scenes every week to be performed by the actors in the workshop. There will be an open discussion of the strengths and weaknesses of the piece from the perspectives of both performer and writer. The goal is to strengthen this relationship through constant work and critique. Every month, students will give a public performance of some of the scenes written for class. Open to writers and performers. Course may be repeated for credit. Mr. DiIorio/Offered periodically

TA236 Playwriting II

This is a course for advanced playwrights who want to bring their work to a higher level. As a result, much is expected in terms of productivity and quality. Students will write a minimum of 10 new pages per week, in addition to rewrites that are suggested in and out of class. New pages will be read and critiqued in class each week. There will be an open discussion of the strengths and weaknesses of the piece from the perspectives of both performer and writer. The goal is to strengthen this relationship through constant work and critique. Every month, students will give a public performance of some of the scenes written for class. By semester's end, each student will have completed one full-length play and a complete act of another full length. Playwriting I is a prerequisite. Permission is also required. Mr. DiIorio/Offered periodically

TA253 Advanced Studies in Shakespeare/Seminar

See English 253.

TA256 Shakespeare from Page to Stage/Lecture, Workshop

See English 256.

TA297 Honors

Staff

TA298 Internship

Staff

TA299 Directed Study

Staff

Program Faculty

Amy Richter, Ph.D. - *Co-director*
Kristen Williams, Ph.D. - *Co-director*
María Acosta Cruz, Ph.D.
Michael Addis, Ph.D.
Margarete Arndt, D.B.A.
Kiran Asher, Ph.D.
Belén Atienza, Ph.D.
Parminder Bhachu, Ph.D.
Melissa Butler, M.A.
Michael Butler, Ph.D.
Marcia Butzel, Ph.D.
Gino DiIorio, M.F.A.
Carol D'Lugo, Ph.D.
Judith DeCew, Ph.D.
Jody Emel, Ph.D.
Patricia Ewick, Ph.D.
Rachel Falmagne, Ph.D.
Odile Ferly, Ph.D.
William Fisher, Ph.D.
Beth Gale, Ph.D.
SunHee Kim Gertz, Ph.D.
Abbie Goldberg, Ph.D.
Eric Gordy, Ph.D.
Janette T. Greenwood, Ph.D.
Beverly C. Grier, Ph.D.
Betsy P. Huang, Ph.D.
Fern Johnson, Ph.D.
Lisa Kasmer, Ph.D.
Sharon Krefetz, Ph.D.
Thomas Kuehne, Ph.D.
Nina Kushner, Ph.D.
Deborah Martin, Ph.D.
Winston Napier, Ph.D.
Heather L. Roberts, Ph.D.
Dianne Rocheleau, Ph.D.
Paul Ropp, Ph.D.
Laurie Ross, Ph.D.
Robert J.S. Ross, Ph.D.
Srinivasan Sitaraman, Ph.D.
Valerie Sperling, Ph.D.
Shelly Tenenbaum, Ph.D.
Alice Valentine, M.A.
Virginia Mason Vaughan, Ph.D.
Kristina Wilson, Ph.D.

Research Faculty

Cynthia Enloe, Ph.D.
Susan Hanson, Ph.D.
Barbara Thomas-Slayter, Ph.D.

Emeriti Faculty

Serena S. Hilsinger, Ph.D.
Dorothy Kaufmann, Ph.D.

Program Overview

Clark launched its women's studies program in 1979. In spring 2006, the university approved the women's and gender studies (WGS) major, effective fall 2006. The women's and gender studies major provides students with a solid foundation in women's studies and gender analysis, introduces them to a range of disciplinary approaches to women and gender, and helps them to develop an area of specialization within the field. Courses stress the importance of social ideas and relationships such as those shaped by gender, ethnicity, race and class to better understand individual and collective experiences, past and present. The major requires a minor in another field (and encourages a double major) in order to reinforce connections with existing majors.

WGS courses are offered by faculty throughout the university, but students are required to take three core courses within the women's studies program: Introduction to Women's Studies, Feminist Theory, and Senior Capstone seminar. With the exception of these core courses, most offerings are cross-listed with the departments in which they originate.

Undergraduate Requirements

All women's and gender studies majors must take ten (10) WGS courses, as well as complete a minor or a second major in another field. The major requirements are distributed as follows:

- Three Core Courses: Introduction to Women's Studies, Feminist Theory, and a Senior Capstone seminar
- Three Introductory or 100-Level Courses from three different departments
- Three 200-Level Courses in a chosen theme or area of specialization from at least two different departments. Students will design a specialization in consultation with their adviser and must receive the approval of the women's and gender studies director. Appropriate specializations include, but are not limited to: women and work; gender and environment; gender, culture and human rights; gender identity and sexuality.
- One Methods or Skills course related to student's WGS specialization. This course may overlap with the required minor or second major.

The women's and gender studies director will help students identify an adviser based on WGS specialization, minor field or second major. Advisers will be drawn from WGS faculty across the university.

Core Courses

WS110 Introduction to Women's Studies
WS200 Feminist Theory
Senior Capstone WGS299, 296 or other

Students must complete a capstone course taught or supervised by a women's and gender studies faculty member and must include a major research paper or essay. It may be an individual internship or a special project. Students may also satisfy the capstone requirement with an approved Women's and Gender Studies Seminar or an Internship Seminar, both of which may be cross-listed with another department.

Capstone seminars include, but are not limited to, the following:

GOVT283 Global AIDS: The Pandemic in Comparative Perspective
SOC294 Global Ethnographies: Ethnographers in the Making for the 21st Century
SOC296 Internship-Seminar on Gender
PSYC275 Societal Approaches to Thinking
PSYC295 Advanced Topics on Gender and Society

Introductory or 100-level courses from a different department:

English
ENG133 Survey of Women Writers I
ENG134 Survey of Women Writers II

Foreign Language and Literature
FREN112 Fairy Tales of the World
JAPN190 Japanese Women Writers

Geography
GEOG136 Gender and Environment

Government and International Relations
GOVT102 Women and War (First-Year Seminar)
GOVT117 Revolution and Political Violence
GOVT147 World Order and Globalization
GOVT175 Women and U.S. Politics

History
HIST037 19th-Century American Through Women's Eyes
HIST219 Women in American History*
HIST229 Women in European History*
HIST282 Chinese Women in Literature and Society*

* These selected 200-level courses can count towards the "Introductory/100 level" requirement.

International Development and Social Change
ID120 Introduction to Cultural Anthropology
ID125 Tales from the Far Side
ID131 Local Action, Global Change

Psychology
PSYC265 Psychology of Men and Masculinity (First-Year Seminar)

Sociology
SOC090 No Sweat (First-Year Seminar)
SOC176 The Family

Visual and Performing Arts
TA109 Contemporary Women Playwrights

200-Level Courses: Specialization in two or more departments

The specialization is not within an existing department or discipline, but should cross at least two. Examples could include Women in Comparative Fiction; Women and Work; Gender and Environment; Gender, War and Militaries; Women and Social Change; Gender, Identity and Sexuality; Gender, Culture and Human Rights; Feminist Critiques of Globalization. Each student will define a specialization (comprising WGS courses in two or more departments) with their adviser, to be approved by the women's and gender studies director. These courses can be developed from among the many courses offered within the following departments/programs:

English
ENG242 Feminist Critical Theory
ENG255 Studies in the Renaissance
ENG260 Studies in 18th-Century British Literature (topic dependent)
ENG262 Studies in 19th-Century British Literature (topic dependent)
ENG263 British Romantic Literature
ENG268 Regendering History: British Women Writing History
ENG277 Race and Gender in African-American Literary Theory
ENG295 Gender and Discourse

Foreign Languages
CMLT208 History and Fiction of Caribbean Women Writers
FREN211 Coming of Age in the French Novel
SPAN236 Women in Hispanic Literature

Geography
GEOG237 Feminism, Nature and Culture
GEOG244 Gender, Work and Space
GEOG258 Utopian Vision, Urban Reality
GEOG277 Gender, Environment and Development

Government and International Relations
GOVT201 AIDS Crisis in Africa
GOVT275 Gender, Politics and Development in Africa
GOVT101 Gender Gap and American Politics
GOVT283 Global AIDS: The Pandemic in Comparative Perspective

History
HIST212 History of Sexuality: 1750 to present
HIST213 Gender and the American City
HIST219 History of American Women
HIST229 Women in European History
HIST234 Racial Thought/Body Politics in Modern Western Societies
HIST236 Gender, War and Genocide: Europe in the 20th Century
HIST282 Chinese Women in Literature and Society

International Development and Social Change
ID209 Beyond Victims and Guardian Angels
ID269 Raced Nature, Gendered Development
IDCE359 Humanitarian Assistance in Conflict/Postconflict
ID285 Gender and Global Change
IDCE30207 Alternating between International Feminist Thinking and Gender, Militarization and Development (Intensive seven-week seminar, 1/2 credit; WGS seniors only)
IDCE30275 Gender and Development Planning (Intensive seven-week seminar, 1/2 credit; WGS seniors only)

Management
MGMT222 Women in the Health-Care System
MGMT5308 Women in Management (Intensive seven-week seminar, 1/2 credit, WGS seniors only)

Philosophy
PHIL219 Feminist Theory

Psychology

PSYC249 Women in Society
PSYC250 Gender, Families, Close Relationships
PSYC275 Societal Approaches to Thinking
PSYC295 Advanced Topics on Gender and Society
PSYC326 Feminist Perspectives on Mind, Self, Identity and Development

Sociology

SOC258 Women in Jewish Culture
SOC275 Family Issues in an Aging Society
SOC294 Global Ethnographies: Ethnographers in the Making for the 21st Century
SOC296 Internship Seminar on Gender

Visual and Performing Arts

ARTH248 Gender and Representation
SCRN288 Gender and Film
ARTS204 Sacred Space

Methods and Skills: One course relevant to student's WGS specialization may overlap with second major or minor. Alternative methods or skills classes may be approved as exceptions by the women's and gender studies director.

- COMM248 Social Research Process
- ENG295 Gender and Discourse
- GEOG107 Miracles of Asia: Economic Growth in Global Context
- GEOG210 Introduction to Quantitative Methods in Geography
- GOVT107 Research Methods
- HIST120 Writing History
- ID132 Research Methods
- PSYC105 Quantitative Methods
- SOC105 Social Research Process
- TA127 Analysis of Theater Production

Women's and Gender Studies Minor

Students who wish to obtain a minor in women's and gender studies must meet the following requirements:

A minimum of six (6) WGS courses distributed as follows:

- WS110 Introduction to Women's Studies.
- Four additional courses listed as part of the WGS program (it is recommended that these include both social sciences and humanities). Two of these courses must be at the 200 level.
- A one-credit internship or special project, or advanced research seminar in WGS. All internships include readings and a faculty supervisor.

Courses

WS037 19th-Century America Through Women's Eyes/ First-Year Seminar

See History 037.

WS040 Witchcraft: Witch Hunts in Early Modern Europe/ First-Year Seminar

See History 040.

WS091 The Gender Gap and American Politics/First-Year Seminar

See Government and International Relations 091.

WS092 Women and War/First-Year Seminar

See Government and International Relations 092.

WS109 Contemporary Women Playwrights

See Theater Arts 109.

WS110 Introduction to Women's Studies

See Government and International Relations110.

WS112 Fairy Tales of the World/Lecture, Discussion/First-Year Seminar

See French 112.

WS117 Revolution and Political Violence/Lecture, Discussion

See Government and International Relations 117.

WS131 Local Action, Global Change/Lecture, Discussion

See International Development and Social Change 131.

WS134 Survey of Women Writers II/Lecture, Discussion

See English 134.

WS138 Gender and Environment/Lecture, Discussion

See Geography 136.

WS147 World Order and Globalization/Discussion

See Government and International Relations 147.

WS175 Women and U.S. Politics/Lecture, Discussion

See Government and International Relations 175.

WS190 Japanese Women Writers

See Japanese 190.

WS200 Feminist Theory

The course provides students with a survey of feminist theories, in national and international context, and traces development of distinct strands of feminist ideas in the academy, popular culture, social movements and political arenas. While the readings include some historical background, the focus is on late-20th century and contemporary schools of thought. The class combines lectures, discussions and seminar-style student presentations on the intersection of gender with race, class, sexuality, age and other dimensions of social identity, and the pathways toward social change and full equality. Throughout the class, students consider the commonalities and contrast in gender relations across cultures and the tensions between several major feminist schools of thought. The review of multiple theories prepares students to read, think and write critically in upper-level classes based in specific approaches within this broader spectrum.

WS201 The HIV/AIDS Crisis in Africa

See Government and International Relations 201.

WS204 Sacred Space/Lecture, Discussion, Projects

See Studio Art 204.

WS207 Her Story: History and Fiction of Caribbean Women Writers

See Comparative Literature 208.

WS209 Beyond Victims and Guardian Angels: Third World Women, Gender and Development/Seminar

See International Development and Social Change 209.

WS210 Spirited Rebellion: Adolescence French Novel and Film/Lecture, Discussion

See French 211.

WS212 History of Sexuality: 1750 to the Present/Lecture, Discussion

See History 212.

WS213 Gender and the City in the United States/Seminar

See History 213.

WS219 History of American Women/Lecture, Discussion
See History 219.

WS222 Women in the Health-Care System/Seminar
See Management 222.

WS229 Women in European History/Lecture, Discussion
See History 229.

WS236 Women in Hispanic Literature/Lecture, Discussion
See Spanish 236.

WS237 Feminism, Nature and Culture/Seminar
See Geography 237.

WS247 Women in Society/First Seminar
See Psychology 249.

WS248 Gender and Representation/Seminar and Practicum
See Art History 248.

WS249 Signs and Crossroads: Semiotic Theory and Practice/Seminar
See English 249.

WS252 Gender, Families and Close Relationships/First Seminar
See Psychology 250.

WS254 The Psychology of Couples and Intimacy/First Seminar
See Psychology 256.

WS256 Studies in the Renaissance/Seminar
See English 255.

WS260 Studies in 18th-Century British Literature/Seminar
See English 260.

WS262 Studies in 19th-Century British Literature/Seminar
See English 262.

WS263 British Romantic Literature: Race and Revolution in Romanticism/Seminar
See English 263.

WS269 Raced Nature, Gendered Developments: The Political Economy of Environmental Conservation/Seminar
See International Development and Social Change 269.

WS273 Gender, Politics and Development in Africa/Seminar
See Government and International Relations 275.

WS277 Gender, Environment and Development/Seminar
See Geography 277.

WS278 Family Issues in an Aging Society/Seminar
See Sociology 275.

WS282 Chinese Women in Literature and Society/Lecture, Discussion
See History 282.

WS283 Global AIDS: The Pandemic in Comparative Perspective/Seminar
See Government and International Relations 283.

WS288 Gender and Film
See Screen Studies 288.

WS295 Gender and Discourse/Seminar
See English 295.

WS296 Internship Seminar: Gender
See Sociology 296.

WS299 Undergraduate Directed Readings in Women's Studies (Tutorial)

WS337 Feminism, Nature and Culture/Seminar
See Geography 237.

WS353 Beyond Victims and Guardian Angels: Third World Women, Gender and Development/Seminar
See International Development and Social Change 209.

WS361 Gender, Militarization and Development/7-Week Module (1/2 credit)
See International Development, Community and Environment 30207.

WS386 Gender in Development Planning/7-week module (1/2 credit)
See International Development, Community and Environment 30275.

ENG133 Survey of Women Writers I/Lecture, Discussion
See English 133.

ENG268 Regendering History: British Women Writing History/Seminar (C-2)
See English 268.

ENG277 Race and Gender in African American Literary Theory/Discussion
See English 277.

FREN256 No More Classrooms, No More Books: Education in 20th Century French Novel and Film/Lecture, Discussion
See French 256.

GOVT090 Political Science Fiction/First-Year Seminar
See Government and International Relations 090.

HIST234 Racial Thought and Body Politics in Modern Europe (1500-2000)/Seminar
See History 234.

HIST236 Gender, War and Genocide in 20th Century Europe/Seminar
See History 236.

ID125 Tales from the Far Side: Development and Underdevelopment/Lecture, Discussion
See International Development and Social Change 125.

ID285 Gender and Global Change/Lecture, Discussion
See International Development and Social Change 285.

IDCE359 Humanitarian Assistance in Conflict/Postconflict
See International Development, Community and Environment 359.

PSYC105 Quantitative Methods/Lecture, Discussion
See Psychology 105.

PSYC265 Psychology of Men/Capstone Seminar
See Psychology 265.

PSYC275 Societal Approaches to Thinking/Capstone Seminar
See Psychology 275.

PSYC295 Advanced Topics on Gender and Society/Capstone Seminar
See Psychology 295.

PSYC326 Feminist Perspectives on Self, Mind, Identity and Development/Graduate Seminar
See Psychology 326.

SOC105 Social Research Process/Lecture, Discussion
See Sociology 105.

SOC294 Global Ethnographies: Ethnographers in the Making for the 21st Century/Seminar
See Sociology 294.

TA127 Analysis of Theater Production/Seminar
See Theater Arts 127.

Concentrations

ASIAN STUDIES

Program Faculty

Paul Ropp, Ph.D. - *Director*
Yuko Aoyama, Ph.D.
Jude Fernando, Ph.D.
William Fisher, Ph.D.
SunHee Kim Gertz, Ph.D.
Betsy P. Huang, Ph.D.
Thomas Massey, Ph.D.
Srinivasan Sitaraman, Ph.D.

Adjunct Faculty

Alice Valentine, M.A.

Program Overview

Asian Studies is an interdisciplinary concentration that can be taken as a complement to any major. The concentration requires six Asian studies courses. Of these six courses, three may be selected from language courses; the other three must be selected from nonlanguage courses. The concentration further requires that two of the nonlanguage courses must be 200-level courses and one must include a significant research component. Students concentrating in Asian studies are encouraged, though not required, to take at least one year of Chinese or Japanese language and to study one year or one semester abroad in Asia.

Through Clark's Study Abroad Office, students may apply to enroll at Kansai Gaidai University near Osaka, Japan, or at the CET program in Beijing, for language and other courses on Japan or China. Students may spend one year or one semester at Kansai Gaidai, which requires at least one year of Japanese language prior to study in Japan. The CET program in Beijing is available for one semester each year in the spring term. Enrollment in the CET program requires at least three semesters of Chinese language study prior to enrollment in China. Clark offers Chinese and Japanese language courses at the beginning and intermediate levels as well as advanced Japanese. Through the Colleges of Worcester Consortium, students may also take advanced Chinese and other Asia-related courses at the College of the Holy Cross.

Courses

AS033 CONFUCIANISM, DAOISM, BUDDHISM: THE CULTURAL HERITAGE OF CHINA/FIRST-YEAR SEMINAR
See History 033.

AS080 INTRODUCTION TO MODERN EAST ASIA/LECTURE, DISCUSSION
See History 080.

AS107 MIRACLES OF ASIA: ECONOMIC GROWTH IN GLOBAL CONTEXTS/LECTURE, DISCUSSION
See Geography 107.

AS180 JAPANESE CULTURE AND LITERATURE IN TRANSLATION/LECTURE, DISCUSSION
See Japanese 180.

AS181 CHINESE CIVILIZATION/LECTURE, DISCUSSION
See History 181.

AS182 MODERN CHINA/LECTURE, DISCUSSION
See History 182.

AS192 POLITICAL ECONOMY OF ASIA
See Government and International Relations 192.

AS233 CONFUCIANISM, DAOISM, BUDDHISM: INTELLECTUAL HISTORY OF CHINA/LECTURE, DISCUSSION
See History 233.

AS254 STILL SPACES–EAST MEETS WEST: CONTEMPLATIVE PRACTICE IN THE CLASSROOM/SEMINAR
See English 254.

AS279 FICTIONS OF ASIAN AMERICA/SEMINAR
See English 279.

AS281 CHINA RISING: THE PEOPLE'S REPUBLIC OF CHINA SINCE 1949/LECTURE, DISCUSSION
See History 281.

AS282 CHINESE WOMEN IN LITERATURE AND SOCIETY/LECTURE, DISCUSSION
See History 282.

AS288 SEMINAR IN CHINESE HISTORY/SEMINAR
See History 288.

CHIN101 ELEMENTARY CHINESE/LECTURE, DISCUSSION
See Chinese 101.

CHIN101 BEGINNING CHINESE/LECTURE, DISCUSSION
See Chinese 101.

HIST286 THE VIETNAM WAR/LECTURE, DISCUSSION
See History 286.

HIST290 POLITICAL DISSENT IN CHINESE HISTORY/SEMINAR
See History 290.

JAPN101 ELEMENTARY JAPANESE/LECTURE, DISCUSSION
See Japanese 101.

JAPN103 INTERMEDIATE JAPANESE/LECTURE, DISCUSSION
See Japanese 103.

JAPN190 JAPANESE WOMEN WRITERS
See Japanese 190.

BIOINFORMATICS

Program Faculty

Arthur Chou, Ph.D. - *Director*
Li Han, Ph.D.
David Hibbett, Ph.D.
David Thurlow, Ph.D.

Program Overview

Bioinformatics has developed at the juncture of the mathematical sciences and the life sciences; its development is analogous to that of molecular biology as a discipline in its own right. According to the National Institutes of Health (NIH), bioinformatics is "research, development or application of computational tools and approaches for expanding the use of biological, medical, behavioral or health data, including those to acquire, store, organize, archive, analyze or visualize such data." Indeed, there is a consensus among observers that biology, regardless of the subspecialty, is being overwhelmed with a large amount of very complex data; what sets biology apart from other data-rich fields is the complexity rather than the sheer volume of the data produced. It is clear that collaboration between computer scientists, mathematicians, biologists and biochemists will be necessary to design information platforms that support the analysis of biological data. The application of mathematical and computational tools to all areas of biology is producing many exciting results, providing insights into biological problems too complex for traditional analysis.

The concentration in bioinformatics at Clark is offered by the departments of Mathematics and Computer Science in collaboration with the departments of Biology and Chemistry. It introduces students to some of the present paradigms and tools in this rapidly evolving discipline and combines knowledge of biology and chemistry with principles from mathematics and computer science that can be used to design tools to solve problems in the life sciences. It is especially well suited for undergraduates who are interested in the life sciences and enjoy quantitative thinking. Students who graduate with a concentration in bioinformatics will be in a strong position to go into industry or continue their education in graduate school either in their major or in a graduate program in bioinformatics.

Undergraduate Requirements

Categories A, B or C

The concentration requires three core courses, plus three electives at least one of which must be at the 200 level. The electives may be chosen from a wide variety of mathematics, computer science, biology and biochemistry courses in consultation with an adviser. In particular, the concentration is designed to be rigorous but flexible.

Course Requirements

1. CSCI120
2. CSCI121
3. BINF101
4. Three Electives:
   a. At least one of these must be at the 200 level.
   b. With the exception of BCMB majors, two of the three electives must be selected from two of the categories A, B, C or D as listed below. BCMB majors require only one elective (from categories C or D) not directly related to the major. In all cases the third elective can come from any category.
   c. At least one may not count as an elective in the student's major, unless the student is doing a dual major in two of the majors listed below.

Possible Bioinformatics Electives

There are a great deal of options in pursuing a bioinformatics concentration. Below is a listing of all possible electives a student may take.

Category A

BIOL105 Evolution
BIOL109 Microbiology
BIOL118 Genetics
BIOL137 Cell Biology
BIOL217 Ecology of Infectious Diseases
BIOL218 Genetics and Disease
BIOL221 Developmental Biology
BIOL228 Molecular Genetics
BIOL231 Recombinant DNA
BIOL234 Signal Transduction
BIOL250 Immunology
BIOL254 Molecular Evolution and Systematics
BIOL280 Biostatistics and Computer Applications

Category B

CHEM144 Bioanalytical Chemistry
CHEM222 Statistical Thermodynamics
CHEM279 Computer Biochemistry
BCMB264 Biophysical Chemistry
CHEM266 Biomolecular NMR
BCMB271 Biochemistry I
CHEM273 Principles of Molecular Modeling
BCMB228 Molecular Genetics

Category C

CSCI140 Computer Organization
CSCI160 Data Structures
CSCI180 Automata Theory
CSCI210 Artificial Intelligence
CSCI212 Scientific Computing
CSCI215 Operating Systems
CSCI220 Database Systems
CSCI230 Compiler Design
CSCI240 Computer Architecture
CSCI250 Software Design
CSCI270 Theory of Computation
CSCI280 Computer Networks
CSCI290 Computer Graphics

Category D

MATH131 Multivariate Calculus
MATH172 Introduction to Analysis
MATH212 Numerical Analysis
MATH214 Modern Analysis
MATH216 Complex Variables
MATH217 Probability
MATH218 Statistics
MATH225 Modern Algebra
MATH228 Topology
MATH244 Differential Equations

Two electives (see note b) must come from two of the following categories:

Major	
Biology	Categories B, C or D
Chemistry	Categories A, C or D
Biochemistry and Molecular Biology	Categories C or D
Mathematics	Categories A, B or C
Computer Science	Categories A, B or C

Courses

BCMB144 Bioanalytical Chemistry/Lecture, Laboratory

See Biochemistry and Molecular Biology 144.

BCMB264 Biophysical Chemistry/Lecture, Laboratory

See Biochemistry and Molecular Biology 264.

BCMB271 Biochemistry I/Lecture, Laboratory

See Biochemistry and Molecular Biology 271.

BINF100 Decoding the Mystery of Life

The successful completion of the Human Genome Project in June 2000 marked an astonishing moment of human history: the first time in the story of life on earth that a species has read its own recipe. But this book of secret code remains largely a mystery to us. Hidden with it lies tens of thousands of genes and millions of other sequences that constitute a treasure trove of secrets of life. It provides not only information for the cure of diseases, but also secret messages from the distant and recent past – from when we were single-celled creatures and from when we took up cultural habits. In this course, students will study the mathematical models and the computational tasks involved in the sequencing of human genome, such as the shot-gun method and the sequence assembly problem. They will study how to compare DNA or protein sequences to find disease genes, how to search for similar sequences to gain insight into the structure and functions of gene sequences, and how to recognize and find genes. Various computer models and algorithms to reconstruct our past, the evolutionary tree, based on the DNA sequences will also be introduced. Along the way discrete mathematical models (trees and graphs) and probabilistic concepts will be introduced, and a simple computer language will be employed to perform string searching and comparison. Many bioinformatics tools and Web resources will be utilized for problem solving. Students will do projects suitable to their background and interest and will be evaluated accordingly. No computer programming skill is required, and the only math prerequisite is some mathematical maturity on the precalculus level. Computer algorithms and mathematical concepts will be introduced gradually throughout the course, in connection with solutions of biological problems. Fulfills the Formal Analysis requirement. Mr. Chou/First-Year Seminar

BINF101 Introduction to Bioinformatics/Lecture, Laboratory
An introduction to the features of biological data, how those data are organized, and how existing data resources can be utilized efficiently by computer programs to solve a variety of biological problems. Covers database searching, sequence analysis of DNA and protein sequences, phylogenetic analysis, visualization and prediction of protein structures. The computer language Python will be used to facilitate the analysis. Three one-hour lectures and one 75-minute lab weekly. Prerequisites: BIOL101 (or AP Biology) and CSCI120 (or AP Computer Programming), or instructors' permission. Mr. Chou, Mr. Hibbett/Offered every year

BIOL105 Evolution/Lecture, Laboratory, Discussion
See Biology 105.

BIOL109 Microbiology/Lecture, Laboratory
See Biology 109.

BIOL118 Genetics/Lecture, Laboratory
See Biology 118.

BIOL137 Cell Biology/Lecture, Laboratory
See Biology 137.

BIOL217 Ecology of Infectious Disease/Seminar
See Biology 217.

BIOL221 Developmental Biology/Lecture, Laboratory
See Biology 221.

BIOL231 Recombinant DNA/Lecture, Laboratory
See Biology 231.

BIOL234 Signal Transduction/Lecture
See Biology 234.

BIOL250 Immunology/Lecture, Discussion
See Biology 250.

BIOL254 Molecular Systematics and Evolution/Lecture, Laboratory
See Biology 254.

CHEM222 Statistical Thermodynamics/Lecture
See Chemistry 222.

CHEM266 Biomolecular NMR/Lecture
See Chemistry 266.

CHEM273 Principles of Molecular Modeling/Lecture
See Chemistry 273.

CHEM279 Computer Biochemistry/Lecture
See Chemistry 279.

CSCI120 Introduction to Computing/Lecture, Laboratory
See Computer Science 120.

CSCI121 Data Structures/Lecture, Laboratory
See Computer Science 121.

CSCI140 Assembly Language And Computer Organization/Lecture, Laboratory
See Computer Science 140.

CSCI160 Algorithms/Lecture, Discussion, Laboratory
See Computer Science 160.

CSCI180 Automata Theory/Lecture, Discussion
See Computer Science 180.

CSCI210 Artificial Intelligence/Lecture, Laboratory
See Computer Science 210.

CSCI215 Operating Systems/Lecture, Laboratory
See Computer Science 215.

CSCI220 Database Management And Systems Design/Lecture
See Computer Science 220.

CSCI230 Compiler Design/Lecture, Laboratory
See Computer Science 230.

CSCI240 Computer Architecture/Lecture
See Computer Science 240.

CSCI250 Software Engineering/Seminar
See Computer Science 250.

CSCI260 Computer Graphics
See Computer Science 260.

CSCI270 Theory of Computation/Lecture
See Computer Science 270.

CSCI280 Computer Networks/Lecture, Laboratory
See Computer Science 280.

GEOG280 Urban Ecology: Cities as Ecosystems/Lecture, Discussion
See Geography 280.

MATH131 Multivariate Calculus/Lecture
See Mathematics 131.

MATH172 Introduction to Modern Analysis/Lecture
See Mathematics 172.

MATH212 Numerical Analysis/Lecture, Laboratory
See Mathematics 212.

MATH214 Modern Analysis/Lecture
See Mathematics 214.

MATH216 Functions of a Complex Variable/Lecture
See Mathematics 216.

MATH217 Probability and Statistics/Lecture
See Mathematics 217.

MATH218 Topics in Statistics/Lecture
See Mathematics 218.

MATH225 Modern Algebra I/Lecture
See Mathematics 225.

MATH228 Topology/Lecture
See Mathematics 228.

MATH244 Differential Equations/Lecture
See Mathematics 244.

COMPUTATIONAL SCIENCE

Program Faculty

Jerry Breecher, Ph.D.
Daeg Brenner, Ph.D.
Arthur Chou, Ph.D.
Harvey Gould, Ph.D.
Frederic Green, Ph.D.
Li Han, Ph.D.
David Hibbett, Ph.D.
Shuanghong Huo, Ph.D.
Todd Livdahl, Ph.D.
Natalia Sternberg, Ph.D.

Program Overview

The enormous progress in computational technology has generated a new methodology for learning and advancing the traditional sciences such as physics, chemistry and biology. Computational science combines the application of numerical methods, models and algorithms in the context of solving problems that are intractable by traditional methods. It is distinct from computer science, which is the study of computers and computation and it is different from theory and experiment, the traditional forms of science, in that it seeks to gain understanding principally by the analysis of mathematical models.

The goal of the computational science concentration is to provide an opportunity for students to learn about the interplay between science and computation. The concentration is especially suitable for undergraduate students majoring in the sciences, mathematics or computer science, but students in other majors will be considered on an individualized basis. Students completing the computational science concentration would be able to enter graduate programs in their majors or newly created interdisciplinary graduate programs in computational science, and would be well prepared to go into industry.

Undergraduate Requirements

Because of the sequential nature of many of the requirements and the relatively large number of major requirements for students in the concentration, students are encouraged to plan early and carefully. A student's choice of advanced courses must be approved by the concentration faculty. The requirements vary depending on the student's major and interests, but all students are required to complete the following (or equivalent):

Introductory Courses

- CSCI120 Computer Programming I (or the equivalent)
- Two semesters of calculus (MATH120, 121 or MATH124, 125)
- Two semesters of physics or chemistry (PHYS110, 111 or PHYS120, 121 or CHEM101, 102)
- PHYS127 Computer Simulation Laboratory

Advanced courses

Four additional courses are required from the following list of recommended courses with the approval of the program faculty:

CSCI121 Computer Programming II
CSCI160 Data Structures and Algorithms
CSCI210 Artificial Intelligence
BIOL101,102 Introduction to Biology
BIOL254 Molecular Evolution and Systematics
BIOL280 Biostatistics and Computer Applications
CHEM102 Introductory Chemistry II
CHEM242 Nuclear Chemistry
CHEM264 Biophysical Chemistry
CHEM270 Quantum Chemistry
CHEM275 Protein Chemistry
MATH114 Discrete Mathematics
MATH212 Numerical Analysis
MATH217 Probability and Statistics

Courses

BIOL101 Introduction to Biology I/Lecture, Laboratory
See Biology 101.

BIOL254 Molecular Systematics and Evolution/Lecture, Laboratory
See Biology 254.

CHEM101 Introductory Chemistry I/Lecture, Laboratory
See Chemistry 101.

CHEM242 Nuclear Science/Lecture
See Chemistry 242.

CHEM270 Quantum Chemistry/Lecture
See Chemistry 270.

CSCI120 Introduction to Computing/Lecture, Laboratory
See Computer Science 120.

CSCI121 Data Structures/Lecture, Laboratory
See Computer Science 121.

CSCI160 Algorithms/Lecture, Discussion, Laboratory
See Computer Science 160.

CSCI210 Artificial Intelligence/Lecture, Laboratory
See Computer Science 210.

MATH114 Discrete Mathematics/Lecture
See Mathematics 114.

MATH120 Calculus I/Lecture
See Mathematics 120.

MATH121 Calculus II/Lecture
See Mathematics 121.

MATH124 Honors Calculus I/Lecture
See Mathematics 124.

MATH125 Honors Calculus II/Lecture
See Mathematics 125.

MATH212 Numerical Analysis/Lecture, Laboratory
See Mathematics 212.

MATH217 Probability and Statistics/Lecture
See Mathematics 217.

PHYS110 Introductory Physics – Part I/Lecture, Discussion, Laboratory
See Physics 110.

PHYS111 Introductory Physics – Part II/Lecture, Discussion, Laboratory
See Physics 111.

PHYS120 Introductory Physics – Part I/Lecture, Discussion, Laboratory
See Physics 120.

PHYS121 Introductory Physics – Part II/Lecture, Discussion, Laboratory
See Physics 121.

PHYS127 Computer Simulation Laboratory/Discussion, Laboratory
See Physics 127.

ETHICS AND PUBLIC POLICY

Program Faculty

Gary Overvold, Ph.D. - *Chair*
Margarete Arndt, D.B.A.
John Blydenburgh, Ph.D.
Robert Bradbury, Ph.D.
Halina Brown, Ph.D.
Brian Cook, Ph.D.
Judith DeCew, Ph.D.
Patrick Derr, Ph.D.
Cynthia Enloe, Ph.D.
Eric Gordy, Ph.D.
Susan Hanson, Ph.D.
Douglas Johnson, Ph.D.
Roger Kasperson, Ph.D.
Deborah Merrill, Ph.D.
Mark Miller, Ph.D.
Edward J. Ottensmeyer, Ph.D.
Michael Pakaluk, Ph.D.
Colin Polsky, Ph.D.
Robert Ross, Ph.D.
Nathaniel C. Seale, M.Ed.
Walter Wright, Ph.D.

Program Overview

The interdisciplinary ethics and public policy concentration can be taken in conjunction with any major at Clark. This concentration is particularly recommended for students who intend to pursue professional or career interests in policy-related fields such as law, government, public administration or health care.

Undergraduate Requirements

The requirements for a concentration in ethics and public policy are designed to familiarize the student with the basic concepts and methods of both ethical analysis and policy analysis; to introduce the theoretical and methodological problems of both ethical analysis and policy analysis; and to ensure that the student engages in sustained analysis of particular ethical and public-policy issues at both an introductory and an advanced level.

At a minimum, the concentration in ethics and public policy requires six courses, distributed in the following manner:

1. **Two required courses in ethics**

   At least one introductory course focused on the basic concepts and methods of ethical analysis. For example:
   PHIL105 Personal Values
   PHIL132 Social and Political Ethics

   At least one advanced course focused on theoretical and methodological problems of ethical analysis. For example:
   GOVT286 Advanced Topics in Contemporary Political Feminist Theories
   PHIL220 History of Ethics
   PHIL221 Social and Political Philosophy
   PHIL228 Contemporary Moral Theory

2. **Two required courses in public-policy analysis**

   At least one introductory course focused on the basic concepts and methods of policy analysis. For example:
   ECON126 Public Policy Toward Business
   EN175 Science, Decision Making and Uncertainty
   GOVT070 Introduction to Comparative Politics
   GOVT107 Research Methods
   GOVT154 The Politics of Public Policy
   GOVT155 Roots of Political Thought

   At least one advanced course focused on theoretical and methodological problems of policy analysis. For example:
   ECON215 Government Finance: Budget Policy in a Comparative Setting
   EN212 Environmental Policy and Management
   EN226 Environmental Hazards
   EN250 Technology Assessment
   EN261 Decision Analysis for Environmental Management
   EN265 Tools for Quantitative Policy Analysis
   GOVT202 Applications of Game Theory
   GOVT213 Policy Analysis
   GOVT253 Judicial Politics
   GOVT255 U.S. Congress
   GOVT281 Politics of Public Management
   SOC243 Political Sociology
   SOC246 Social Planning and Social Policy

3. **Two required courses on applications and problems.**

   At least one introductory course focused on particular ethical and public-policy issues. For example:
   EDUC155 Education and Social Policy
   EN182 People, Politics and Pollution
   GEOG105 The Keeping of Animals: Patterns of Use and Abuse
   GOVT147 Normative World Orders
   GOVT157 The Politics of Environmental Issues

ID108 World Population
ID125 Development Problems
PHIL130 Medical Ethics
PHIL131 Environmental Ethics
PHIL133 Business Ethics
SOC150 Class, Status and Power
SOC180 Aging and Society

At least one advanced course devoted to the intensive analysis of particular ethical and public-policy issues. For example:

ECON216 Tax Systems and Policies
ECON225 Health Policy
ECON126 Public Policy Toward Business
EN210 Environment and Society
EN226 Environmental Hazards: Theory, Models and Applications
EN251 Limits of Earth
EN282 Management of Environmental Pollutants
GEOG254 Urban Transportation: Problems and Prospects
GEOG258 Utopian Vision, Urban Reality
GOVT221 Urban Policy and Internships
GOVT250 National Security Policy Making in the United States
ID232 Population, Environment and Development
MGMT262 Business Ethics
PHIL270 Philosophy of Law
PHIL272 Advanced Issues in Medical Ethics
SOC241 Sociology of Medicine
SOC265 Social Movements: The Quest for Justice

Courses

EDUC155 Education and Social Policy/Lecture, Discussion
See Education 155.

EN265 Risk Analysis: Policy and Methods/1/2 credit/ Seven week module
See Environmental Science 265.

ENG257 Language at Issue/Seminar
See English 257.

EPP105 Personal Values/Lecture, Discussion
See Philosophy 105.

EPP106 Keeping of Animals: Patterns of Use and Abuse/ Lecture, Discussion
See Geography 105.

EPP107 Research Methods/Lecture, Discussion
See Government and International Relations 107.

EPP108 Privacy Protection In Law and Ethics/First-Year Seminar
See Philosophy 108.

EPP130 Medical Ethics/Lecture, Discussion
See Philosophy 130.

EPP147 World Order and Globalization/Discussion
See Government and International Relations 147.

EPP154 The Politics of Public Policy in the United States/ Lecture, Discussion
See Government and International Relations 154.

EPP155 Roots of Political Thought/Lecture, Discussion
See Government and International Relations 155.

EPP180 Aging and Society/Lecture, Discussion
See Sociology 180.

EPP200 Class, Status and Power/Variable Format
See Sociology 200.

EPP220 Theories of Ethics/Lecture, Discussion
See Philosophy 220.

EPP221 Social and Political Philosophy/Lecture, Discussion
See Philosophy 221.

EPP226 Who Fears What and Why: Social Theories of Environmental Risks and Hazards/Seminar, Lecture, Discussion
See Geography 226.

EPP232 Population, Environment and Development/Variable Format
See Sociology 232.

EPP241 Sociology of Medicine/Lecture, Discussion
See Sociology 241.

EPP242 Human Rights and Transitional Justice/Lecture, Discussion
See Sociology 242.

EPP243 Political Sociology/Variable format
See Sociology 243.

EPP250 U.S. National Security/Lecture, Discussion
See Government and International Relations 250.

EPP258 Utopian Visions, Urban Realities: Planning Cities for the 21st Century/Lecture, Discussion
See Geography 258.

EPP262 Business Ethics and Law
See Management 262.

EPP265 Social Movements: Quest for Justice/Variable Format
See Sociology 265.

EPP270 Philosophy of Law/Seminar
See Philosophy 270.

EPP283 Housing Policies and Politics/Seminar
See Government and International Relations 282.

GEOG025 Suburban Sprawl under the Microscope/Lecture, Discussion, First-Year Seminar
See Geography 025.

GEOG254 Urban Transportation: Problems and Prospects/ Lecture, Discussion
See Geography 254.

GOVT070 Introduction to Comparative Politics/Lecture, Discussion
See Government and International Relations 070.

GOVT147 World Order and Globalization/Discussion
See Government and International Relations 147.

GOVT154 The Politics of Public Policy in the United States/ Lecture, Discussion
See Government and International Relations 154.

GOVT157 The Politics of U.S. Environmental Issues/ Lecture, Discussion
See Government and International Relations 157.

GOVT173 Introduction to Latin American Politics/ Lecture, Discussion
See Government and International Relations 173.

GOVT213 Policy Analysis/Lecture, Discussion
See Government and International Relations 213.

GOVT221 Urban Policy/Seminar and Internship
See Government and International Relations 221.

GOVT250 U.S. National Security/Lecture, Discussion
See Government and International Relations 250.

GOVT253 U.S. Judicial Politics/Lecture, Discussion
See Government and International Relations 253.

GOVT255 The Politics of U.S. Congress/Lecture, Discussion
See Government and International Relations 255.

GOVT281 The Politics of Policy Implementation/Seminar
See Government and International Relations 281.

GOVT282 Housing Policies and Politics/Seminar
See Government and International Relations 282.

GOVT286 Advanced Topics in Comparative Politics/Seminar
See Government and International Relations 286.

ID125 Tales from the Far Side: Development and Underdevelopment/Lecture, Discussion
See International Development and Social Change 125.

IDCE352 Technology and Environmental Assessment Seminar
See International Development, Community and Environment 352.

PHIL108 Privacy Protection In Law and Ethics/First-Year Seminar
See Philosophy 108.

PHIL131 Environmental Ethics/Lecture, Discussion
See Philosophy 131.

PHIL132 Social and Political Ethics/Lecture, Discussion
See Philosophy 132.

PHIL133 Business Ethics/Lecture, Discussion
See Philosophy 133.

PHIL220 Theories of Ethics/Lecture, Discussion
See Philosophy 220.

PHIL228 Contemporary Moral Theory/Lecture, Discussion
See Philosophy 228.

PHIL272 Advanced Issues in Medical Ethics/Seminar
See Philosophy 272.

SOC264 Organized Crime and Corruption
See Sociology 264.

SOC285 Social Policy, Immigration and Poverty/Seminar
See Sociology 285.

HOLOCAUST AND GENOCIDE STUDIES

Program Faculty

Shelly Tenenbaum, Ph.D. - *Director*
Paul Burke, Ph.D.
Debórah Dwork, Ph.D.
Jody Emel, Ph.D.
Everett Fox, Ph.D.
Eric Gordy, Ph.D.
Beverly C. Grier, Ph.D.
Thomas Kuehne, Ph.D.
Robert Melson, Ph.D.
Simon Payaslian, Ph.D.
Walter Schatzberg, Ph.D.
Srinivasan Sitaraman, Ph.D.
Valerie Sperling, Ph.D.
Jaan Valsiner, Ph.D.
Kristen Williams, Ph.D.

Program Overview

The Holocaust and other acts of genocide are studied to enhance our understanding of the society from which we came, the society in which we live, and the society to which we currently are giving shape. By studying the Holocaust and genocide, we learn about collusion and resistance; about the hot violence of mass murder and the cold violence of the modern, bureaucratic machinery of death; and about suffering and adaptation to suffering. We learn how societies disintegrated, step by step, and how ordinary men, women, and children both participated in and were affected by this disintegration. We learn, in short, a tremendous amount about what we need to know now to help us make the world a better place, wherever we might be.

The undergraduate concentration in Holocaust and genocide studies provides students with solid grounding in the history of the Holocaust and other genocides. Students also take a series of courses in a variety of disciplines to ensure a critical, analytical and sophisticated understanding of the various facets of these atrocities. The undergraduate program of study encompasses history, sociology, government, geography and psychology.

Undergraduate Requirements

The Holocaust and genocide studies concentration may be pursued in conjunction with any major. Students are required to take seven courses that include:

- Two of the following three courses: SOC130 Genocide, GOVT214 Mass Murder and Genocide Under Communism, HIST175 Holocaust: Agency and Action
- Two courses from section A
- One course from section B
- One course from section C
- A capstone seminar

The seven courses must be taken from at least three different departments. At least two of the total seven courses must be at the 200 level. The program faculty members will serve as advisers to students, providing guidance in selecting courses and developing a capstone experience.

Section A

Two out of this list are required:

- CLAS262 Jews and Christians in the Ancient World
- GERM188 The Culture of the Weimar Republic in Literature, Film and the Arts
- GOVT136 Sub-Saharan Africa
- HIST115 Authority and Democracy: The History of Modern Central Europe
- HIST135 History of Armenia
- HIST142 Central Europe in the Long 19th Century
- HIST143 War and Peace: Central Europe, 1914-2003
- HIST153 Europe in the Age of Extremes
- HIST234 Racial Thought and Body Politics in Modern Europe
- HIST253 20th-Century Europe
- HIST259 Modern Germany
- JS130 Suffering and Evil in Jewish Tradition
- JS174 The Jewish Experience
- JS276 Modern Jewish History and Thought
- SOC233 Hatred

Section B

One out of this list is required:

- HIST175 Holocaust: Agency and Action *
- HIST165 Nazi Germany
- HIST236 Gender, War and Holocaust Germany
- HIST237 Holocaust Perpetrators
- HIST260 Rescue and Resistance
- HIST261 Jewish Children in Nazi Europe
- HIST265 Life and Death in the City: Occupied Europe, 1939-1945
- HIST266 Refugees
- HIST268 Holocaust Issues and Controversies
- HIST273 Life Under Occupation

* Can fulfill Section B requirements only if not taken as one of the three core courses.

Section C

One out of this list is required:

- GEOG090/197 Native Americans and Natural Resources
- GOVT093 International Human Rights
- GOVT146 United Nations and International Law
- GOVT214 Mass Murder and Genocide Under Communism **
- GOVT240 Human Rights and International Politics
- SOC242 Human Rights and Transitional Justice
- GOVT278 Holocaust and Genocide in Comparative Perspective
- GOVT289 Advanced Topics in International Politics: International Law and Human Rights
- GOVT289 Advanced Topics in International Politics: Nationalism, Ethnic Conflict and International Security
- HIST230 The Armenian Genocide
- HIST247 The Western Powers and the Armenian Genocide
- SOC130 Genocide **
- PSYC264 Cultural and Social Psychology of Genocides

** Can fulfill Section C requirements only if not taken as one of the three core courses.

Capstone Courses

The capstone requirement may be fulfilled through a directed-research project or seminar. Students must receive permission from the instructor to count a seminar as the capstone experience. Examples of seminars that fulfill the capstone requirement are:

- GOVT278 Holocaust and Genocide in Comparative Perspective
- GOVT289 Advanced Topics in International Relations: International Law and Human Rights
- GOVT289 Advanced Topics in International Relations: Nationalism, Ethnic Conflict, and International Security
- HIST234 Racial Thought and Body Politics in Modern Europe
- HIST236 Gender, War and Holocaust
- HIST247 The Western Powers and the Armenian Genocide
- HIST260 Rescue and Resistance
- HIST261 Jewish Children in Nazi Europe
- HIST265 Life and Death in the City: Occupied Europe, 1939-1945
- HIST266 Refugees
- HIST268 Holocaust Issues and Controversies
- HIST273 Life Under Occupation
- PSYC264 Cultural and Social Psychology of Genocides

Graduate Program

The department offers programs leading to the degrees of Master of Arts and Doctor of Philosophy with specialization in various fields of history. Emphasis is placed on tailoring programs to fit the specific needs and desires of the graduate student. To facilitate this goal, a committee of interested faculty works with each student to advise and review his/her progress in research work and course requirements (six courses are required). Up to one year's equivalent of teaching apprenticeship will be required of all candidates for advanced degrees. In addition to formal course work, all students must pass qualifying examinations and submit and defend a research thesis.

Ph.D. candidates must pass preliminary examinations and meet the department language requirement. For further details, students should consult the appropriate departmental publications. Graduate scholarships, teaching assistantships and research fellowships are available.

Courses

HGS090 NATIVE AMERICANS AND NATURAL RESOURCES

See Geography 197.

HGS188 THE CULTURE OF THE WEIMAR REPUBLIC IN LITERATURE, FILM AND THE ARTS/LECTURE, DISCUSSION

See German 188.

HGS115 AUTHORITY AND DEMOCRACY: THE HISTORY OF MODERN CENTRAL EUROPE/LECTURE, DISCUSSION

See History 115.

HGS130 GENOCIDE

See Sociology 130.

HGS131 SUFFERING AND EVIL IN JEWISH TRADITION/LECTURE, DISCUSSION

See Jewish Studies 130.

HGS135 HISTORY OF ARMENIA/LECTURE, DISCUSSION

See History 135.

HGS136 SUB-SAHARAN AFRICA: ISSUES AND PROBLEMS/LECTURE, DISCUSSION

See Government and International Relations 136.

HGS142 Central Europe in the Long 19th century (1756-1914) Lecture/Discussion
See History 142.

HGS146 The United Nations and International Law
See Government and International Relations 146.

HGS153 Europe in the Age of Extremes: the 20th Century
See History 153.

HGS174 The Jewish Experience/Lecture, Discussion
See Jewish Studies 174.

HGS175 Holocaust: Agency and Action Lecture, Discussion
See History 175.

HGS214 Mass Murder and Genocide Under Communism/ Lecture, Discussion
See Government and International Relations 214.

HGS230 Armenian Genocide/Seminar
See History 230.

HGS234 Racial Thought and Body Politics in Modern Europe (1500-2000)/Seminar
See History 234.

HGS236 Gender, War and Genocide in 20th Century Europe/Seminar
See History 236.

HGS237 The Holocaust Perpetrators
See History 237.

HGS240 Human Rights and International Politics/ Lecture, Discussion
See Government and International Relations 240.

HGS242 Human Rights and Transitional Justice/Lecture, Discussion
See Sociology 242.

HGS247 The Western Powers and the Armenian Genocide
See History 247.

HGS253 20th-Century Europe/Lecture, Discussion
See History 253.

HGS259 Modern Germany/Lecture, Discussion
See History 259.

HGS260 Rescue and Resistance During the Holocaust/Seminar
See History 260.

HGS261 Jewish Children in Nazi-Occupied Europe/Seminar
See History 261.

HGS262 Jews and Christians in the Ancient World
See Classics 262.

HGS265 Life and Death in the City: Occupied Europe, 1939-1945/Seminar
See History 265.

HGS266 Refugees/Seminar
See History 266.

HGS268 The Holocaust: Issues and Controversies/Seminar
See History 268.

HGS278 Holocaust and Genocide in Comparative Perspective
See Government and International Relations 278.

HGS289 Advanced Topics in International Relations/Seminar
See Government and International Relations 289.

HGS143 War and Peace: Central Europe, 1914-2003
See History 143.

HGS165 Nazi Germany/Lecture,Discussion
See History 165.

HGS237 The Holocaust Perpetrators
See History 237.

HGS247 The Western Powers and the Armenian Genocide
See History 247.

HGS273 Life Under Occupation/Seminar
See History 273.

HGS276 Modern Jewish History and Thought/Lecture, Discussion
See History 276.

HGS264 Social and Cultural Psychology of Genocide
See Psychology 264.

HGS315 Social and Cultural Psychology of Genocides/ Graduate Seminar
See Psychology 315.

HGS233 Hatred
See Sociology 233.

GOVT093 International Human Rights
See Government and International Relations 093.

JEWISH STUDIES

Program Faculty

Everett Fox, Ph.D. - *Director*
Debórah Dwork, Ph.D.
Shelly Tenenbaum, Ph.D.

Program Overview

Jewish studies at Clark is designed to introduce the student to the major historical and religious trends in Jewish civilization since its inception in antiquity. The courses reflect the broad range of developments both encountered and fostered by the Jewish people including their contact with other world civilizations, classical literature, social and religious institutions, as well as their interaction with the modern world. In these courses, Jews and Judaism are studied both in their own internal context and as paradigms for wider trends in history and religion.

Undergraduate Requirements

All students must take JS174 The Jewish Experience, a survey of Jewish history and thought. In addition to JS174, students must take six courses of which at least two must be in the Classical area and at least two in the Modern area. One of the six courses must be an integrating capstone project (internship, independent study, or advanced seminar with the approval of the program director). Two courses in Hebrew language may also count toward concentration.

CLASSICAL

CLAS262 Jews and Christians in the Ancient World
CLAS267 The Religious Experience in the Ancient World
JS117 Introduction to the Hebrew Bible I: Narrative and Law
JS118 Introduction to the Hebrew Bible II: Prophecy and Poetry
JS121 Laws and Legends, Maxims and Mystical Tales
JS123 The Midrashic Tradition
JS130 Suffering and Evil in Jewish Tradition
JS150 Jerusalem in History and Imagination

MODERN

- GOVT245 Americans, Israelis and Arabs
- HIST175 The History of the Holocaust to 1933
- HIST276 Modern Jewish History and Thought
- JS210 Arab-Israeli Conflict
- JS277 The History of Zionism and Israel
- SOC203 American Jewish Life
- SOC258 Women in Jewish Culture (also Classical)

Courses

CLAS267 Religious Experience in the Ancient World/Lecture, Discussion
See Classics 267.

GOVT245 Americans, Israelis and Arabs/Lecture, Discussion
See Government and International Relations 245.

HEBR101 Elementary Hebrew I/Lecture, Discussion
See Hebrew 101.

HEBR102 Elementary Hebrew II/Lecture
See Hebrew 102.

HEBR103 Intermediate Hebrew/Lecture, Discussion
See Hebrew 103.

HEBR104 Intermediate-Advanced Hebrew/Lecture, Discussion
See Hebrew 104.

HGS212 Eastern European Jewish History and Culture Between the Two World Wars
See Holocaust and Genocide Studies 212.

HIST152 Jews in Early Modern Europe and Colonial America/Lecture, Discussion
See History 152.

HIST175 Holocaust: Agency and Action Lecture, Discussion
See History 175.

HIST276 Modern Jewish History and Thought/Lecture, Discussion
See History 276.

JS117 Reading the Narratives of the Hebrew Bible/First-Year Seminar
The first half of the Hebrew Bible–the books of Genesis through Kings–is a central text of Western culture. But how are these texts to be read? As history, myth, religious program, foundation of Judaism, foundation of Christianity? Using the tools of comparative ancient Near eastern languages and cultures, the history of religion, literary analysis and folklore, we will explore the Bible's many faces, and try to show how the answer to the question is close to "all of the above." We will also view the texts through the window of later interpretation among Jews and Christians, and see how many generations came to view themselves and their own story through the ones presented in the Bible. Fulfills the Historical Perspective. Mr. Fox/Offered every year

JS118 Introduction to the Hebrew Bible II: Prophecy and Poetry/Lecture, Discussion
A close reading (in English) of the poetic portions of the Hebrew Bible, from Isaiah through the Writings. The prophetic revolution in Israel is evaluated: its roots, as well as its impact on its own society and later social and cultural criticism in the West. The artistry of biblical poetry is analyzed, along with the thematics of piety, despair, resignation and eroticism that are found in such books as the Psalms and the Song of Songs. Finally, books of a more philosophical bent (Ecclesiastes, Job), which question the earlier assumptions of biblical faith, are read. As in JS117, emphasis is placed in the influence of the Bible on later thinking in the West. Mr. Fox/Offered every year

JS121 Laws and Legends, Maxims and Mystical Tales
Introduces (in English) major texts of post-Biblical Judaism. Beginning with the Roman period, the texts cover such diverse areas as folklore, ethics, legal rules and mysticism. The sources involve ancient answers to questions of everyday living, physical and spiritual survival, and celebration; we also trace the reformulation of such questions down to the eve of the modern period. Stresses how the texts work, centering on the role of commentary as a classic form of Jewish discourse and on an active style of group learning. Mr. Fox/Offered every other year

JS123 The Midrashic Tradition/Lecture, Discussion
An English-language study of Midrashic literature, the primary Jewish literary expression after the Bible. Written down mainly during the Roman period, the texts comprise independent legends about supernatural beings; writings about biblical characters (filling in gaps in the biblical stories); traditions about the lives of the ancient rabbis; and wide-ranging statements about worldly wisdom, ethical values and political reality. Sources are ready with an eye toward what they reveal about ancient Jewish society and in the light of recent work in folklore studies. A final unit considers later forms of Midrash, such as Hasidic and contemporary variations. Mr. Fox/Offered every other year

JS130 Suffering and Evil in Jewish Tradition/Lecture, Discussion
A central problem in Western religious thought is theodicy: how to explain the existence of suffering and evil in a world ruled by a supposedly benevolent God. Examines a variety of Jewish sources on the problem, which propose a wide variety of answers. Central are the biblical book of Job and its interpretations through the centuries; at the other end of history, responses to the Holocaust are considered.
Mr. Fox/Offered every other year

JS150 Jerusalem in History and Imagination/Lecture, Discussion
Surveys fortunes and forms of Jerusalem from Bronze Age to present day. Examines the political and religious visions for the city (pagan, Jewish, Christian, Muslim) and the secular and religious aspirations of these groups as they have become inextricably entangled with the history of the city. Mr. Burke and Mr. Fox/Offered periodically

JS174 The Jewish Experience/Lecture, Discussion
Surveys history of the Jewish community and the development of Judaism from the era of Alexander the Great (c. 325 B.C.E.) to the present. Examines the major political, religious, social and economic trends of each period as they affected the Jewish community and the development of Judaism. Emphasizes elements of change and continuity, as well as interaction of the Jewish community with the larger culture and community. Fulfills the Historical Perspective. Mr. Fox/Offered every year

JS203 American Jewish Life/Variable Format
See Sociology 203.

JS258 Women in Jewish Culture/Lecture, Discussion
See Sociology 258.

JS262 Jews and Christians in the Ancient World
See Classics 262.

LAW AND SOCIETY

Program Faculty

Mark Miller, Ph.D. - *Director*
Judith DeCew, Ph.D.
Patricia Ewick, Ph.D.

Program Overview

The interdisciplinary law and society concentration explores questions about the impact and effects of law, legal institutions and legal actors on society from a variety of perspectives. It also explores the identification and analysis of legal arguments in a variety of contexts. Some of the courses also help the students develop their oral advocacy skills. The concentration can be taken in conjunction with any major at Clark. Generally, 200-level courses are not appropriate for first-year students.

Undergraduate Requirements

1. Students must take a minimum of six courses to fulfill the concentration.
2. The six courses must come from at least three different departments.
3. At least two of the courses must be at the 200 level.
4. At least one of the six courses must be a core course, which should be taken as early as possible in the student's academic program:
    - GOVT050 Introduction to American Government
    - PHIL132 Social and Political Ethics
    - SOC262 Law and Society
5. One of the six courses must be a capstone experience (a seminar, an internship or a directed-research project):
    - PHIL270 Seminar: Philosophy of Law
    - GOVT291 Seminar: Lawyers and American Politics
    - GOVT293 Seminar: Constitutional Democracy
    - GOVT296 Seminar: Con Law of Pres-Congress Relations
    - Legal Internships in a variety of academic departments
    - Directed research or special projects in a variety of academic departments
6. No more than two of the courses can also be counted for the student's major or minor requirements, or for another concentration.

Courses

ECON126 Public Policy toward Business/Lecture, Discussion
See Economics 126.

ECON157 The Economics of Natural Resources and the Environment/Lecture
See Economics 157.

ECON222 Labor/Lecture, Discussion
See Economics 222.

ECON257 Environmental and Natural Resource Economics
See Economics 257.

GOVT190 Leadership in American Politics
See Government and International Relations 190.

GOVT257 Comparative Courts and Law/Lecture, Discussion
See Government and International Relations 257.

GOVT271 The American Jury System/Lecture, Discussion
See Government and International Relations 271.

GOVT274 The Supreme Court in American Society/Lecture, Discussion
See Government and International Relations 274.

GOVT289 Advanced Topics in International Relations/Seminar
See Government and International Relations 289.

HIST070 Our European Roots: Western Civilization from Ancient Hebrews through the Renaissance and Reformation/Lecture, Discussion
See History 070.

HIST201 Era of the American Revolution/Lecture, Discussion
See History 201.

HIST202 The Early American Republic/Lecture, Discussion
See History 202.

HIST212 History of Sexuality: 1750 to the Present/Lecture, Discussion
See History 212.

HIST214 The American Civil War/Lecture, Discussion
See History 214.

HIST217 Reconstruction: America after the Civil War, 1865-1877/Seminar
See History 217.

HIST223 The Civil-Rights Movement/Lecture, Discussion
See History 223.

LAS038 Trial Advocacy
This course teaches the fundamentals of the trial of a case in a court of law. The students are expected to prepare and deliver oral presentations, simulated openings, closings and witness examinations during the semester. The culmination of the course is a series of trials in which the students are the attorneys and witnesses. This course is a prerequisite for participating on Clark's Intercollegiate Mock Trial Team.

LAS039 Advanced Trial Advocacy, I and II
This course involves the participation of two teams of Clark University students in the American Mock Trial Association tournaments. The tournaments require each team to prepare and try four cases against other colleges and universities using students as attorneys and witnesses. LAS038 is a prerequisite to this class.

LAS050 Introduction to American Government/Lecture, Discussion
See Government and International Relations 050.

LAS146 The United Nations and International Law
See Government and International Relations 146.

LAS196 Strategic Speaking/Workshop
See English 196.

LAS202 The Early American Republic/Lecture, Discussion
See History 202.

LAS212 History of Sexuality: 1750 to the Present/Lecture, Discussion
See History 212.

LAS214 The American Civil War/Lecture, Discussion
See History 214.

LAS221 Social and Political Philosophy/Lecture, Discussion
See Philosophy 221.

LAS242 Human Rights and Transitional Justice/Lecture, Discussion
See Sociology 242.

LAS253 U.S. Judicial Politics/Lecture, Discussion
See Government and International Relations 253.

LAS257 Language at Issue/Seminar
See English 257.

LAS261 Business Ethics and Law
See Management 262.

LAS262 Law and Society/Lecture, Discussion
See Sociology 262.

LAS263 Deviance/Variable Format
See Sociology 263.

LAS264 Organized Crime and Corruption
See Sociology 264.

LAS270 Philosophy of Law/Seminar
See Philosophy 270.

LAS271 The American Jury System/Lecture, Discussion
See Law and Society 271.

LAS272 U.S. Constitutional Law: Civil Liberties/Lecture, Discussion
See Government and International Relations 272.

LAS273 U.S. Constitutional Law: Governmental Powers/ Lecture, Discussion
See Government and International Relations 273.

LAS276 Environmental Law/Lecture, Discussion
See Government and International Relations 276.

LAS289 Advanced Topics in International Relations/Seminar
See Government and International Relations 289.

LAS291 Lawyers and Politics/Seminar
See Government and International Relations 291.

LAS293 Constitutional Democracy/Seminar
See Government and International Relations 293.

MGMT178 Business Law/Lecture, Discussion
See Management 178.

PHIL107 Logic and Legal Analysis/Lecture, Discussion
See Philosophy 107.

PHIL108 Privacy Protection In Law and Ethics/First-Year Seminar
See Philosophy 108.

PHIL132 Social and Political Ethics/Lecture, Discussion
See Philosophy 132.

SOC264 Organized Crime and Corruption
See Sociology 264.

PEACE STUDIES

Program Faculty

Joseph de Rivera, Ph.D. - *Director*
Patrick Derr, Ph.D.
Debórah Dwork, Ph.D.
William Fisher, Ph.D.
Eric Gordy, Ph.D.
Janette T. Greenwood, Ph.D.
George Lane, M.A.
Douglas Little, Ph.D.
Paul W. Posner, Ph.D.
Dianne Rocheleau, Ph.D.
Robert Ross, Ph.D.
Valerie Sperling, Ph.D.
Kristen Williams, Ph.D.
Walter Wright, Ph.D.

Program Overview

The Peace Studies program is concerned with analyzing alternative ways that may be used to transform individual behavior, national policy and human institutions in order to promote peace and justice in the world. The program promotes discussion and study on issues of conflict and its management, within the lives of individuals, societies and the world at large. It sponsors research on meditation, mediation, negotiation and ways to reduce violence, build diverse communities and use nonviolent action to defend human rights and promote justice.

Undergraduates may concentrate in peace studies to complement any major. Students may also design a major in peace studies via the University's self-designed major. The concentration draws together the knowledge of several disciplines in the context of the search for peace, while enhancing students' critical-thinking skills and awareness of the connections between local and global issues. Departments and programs represented in peace studies include government, history, international development and social change, philosophy, psychology and sociology.

Course work, research and internships enable students to apply their theoretical understanding of the issues of peace to practical situations. The concentrator needs to have an active understanding of the relationship between the three spheres of peace: personal, societal and global. These are interlocked, each influencing the others in cyclical patterns. Conflicts often involve links between the hearts of individuals, the structures of societies, and global competition and cooperation. Hence, the concentrator should be engaged in understanding how personal development and societal and global structure can transform conflicts. Students who complete a concentration in peace studies are prepared to enter careers and graduate study in such fields as public policy, international development, labor relations, environment and ecology, and international relations. They are prepared to take an active role in shaping constructive policies in the public sector and civil society.

The Peace Studies Office provides information on internships, jobs and careers; a library; and a computer link to international conferences and bulletin boards.

Undergraduate Requirements

The peace studies concentration requires six courses. Students take PSTD101 An Introduction to Peace Studies and the Psychology of Peace, and at least one course from each of three groups of courses dealing with issues of negotiation and political influence, nonviolent action, and strength and conflict. Students select a fifth course from any of the three clusters. Finally, the sixth course, which involves at least one of the skills of peacemaking and enables the student to examine personal transformation, is chosen from those listed under the category "Internships, Directed Readings, Research and Capstone Courses." (At least two courses should be at the 200 level; two may be from the student's major.)

Courses

The following is a list of Clark's peace studies course offerings. Students may petition the Peace Studies Committee to receive concentration credit for courses other than those listed below, including courses that are available through the Colleges of Worcester Consortium. More information may be obtained from the Peace Studies Office, 201 Jonas Clark, (508) 793-7663.

PSTD101 An Introduction to Peace Studies and the Psychology of Peace

Nonviolent Action Courses

GOVT173 Introduction to Latin American Politics
GOVT177 Transitions to Democracy
GOVT251 Social Movements and Interest Groups
HIST233 The Civil Rights Movement
ID131 Local Action, Global Change
ID253 Social Movements, Globalization and the State
SOC265 Social Movements: Quest for Justice

Negotiation and Political Influence Courses

ID266 Principles of Negotiation and Mediation: An Overview of Conflict Resolution Approaches
GOVT080 Model United Nations Program
GOVT154 The Politics of Public Policy in the United States
GOVT205 Campaigns and Elections
GOVT211 International Cooperation
GOVT251 Social Movements and Interest Groups
GOVT255 The Politics of Congress
SOC243 Political Sociology

Strength and Conflict Courses

GOVT070 Introduction to Comparative Politics
GOVT117 Revolution and Political Violence
GOVT210 Violence: The Case of the Middle East
GOVT245 Americans, Israelis and Arabs
GOVT250 U.S. National Security
GOVT290 Inter-American Relations
HIST230 Armenian Genocide
HIST259 Modern Germany
HIST260 Rescue and Resistance during the Holocaust
HIST287 Advanced Topics in International Relations
SOC130 Genocide

Internships, Directed Readings, Research and Capstone Courses

PSYC246 Psychology of Peacemaking
PSTD290 Special Topics in Peace Studies
PSTD298 Directed Readings in Peace Studies
PSTD299 Peace Studies Internship

Courses

GOVT117 Revolution and Political Violence/Lecture, Discussion
See Government and International Relations 117.

GOVT177 Transitions to Democracy/Lecture, Discussion
See Government and International Relations 177.

GOVT205 U.S. Campaigns and Elections/Lecture, Discussion
See Government and International Relations 205.

GOVT211 International Cooperation
See Government and International Relations 211.

GOVT245 Americans, Israelis and Arabs/Lecture, Discussion
See Government and International Relations 245.

GOVT251 U.S. Social Movements and Interest Groups/Lecture, Discussion
See Government and International Relations 251.

GOVT255 The Politics of U.S. Congress/Lecture, Discussion
See Government and International Relations 255.

GOVT290 Inter-American Relations/Seminar
See Government and International Relations 290.

HIST230 Armenian Genocide/Seminar
See History 230.

HIST259 Modern Germany/Lecture, Discussion
See History 259.

HIST260 Rescue and Resistance During the Holocaust/Seminar
See History 260.

PSTD070 Introduction to Comparative Politics/Lecture, Discussion
See Government and International Relations 070.

PSTD080 Model United Nations Program
See Government and International Relations 080.

PSTD101 Introduction to Peace Studies/Lecture
Can we manage the conflicts in our personal lives, our society and our world, so they result in development and justice rather than oppression and destruction? We consider four paths towards peace: strength, negotiation, nonviolent struggle, and personal transformation. Students are asked to investigate these paths and develop their own stance towards achieving peace. Mr. DeRivera/Offered every year

PSTD130 Genocide
See Sociology 130.

PSTD131 Local Action, Global Change/Lecture, Discussion
See International Development and Social Change 131.

PSTD154 The Politics of Public Policy in the United States/Lecture, Discussion
See Government and International Relations 154.

PSTD157 THE POLITICS OF U.S. ENVIRONMENTAL ISSUES/LECTURE, DISCUSSION
See Government and International Relations 157.

PSTD173 INTRODUCTION TO LATIN AMERICAN POLITICS/ LECTURE, DISCUSSION
See Government and International Relations 173.

PSTD223 THE CIVIL RIGHTS MOVEMENT/LECTURE, DISCUSSION
See History 223.

PSTD246 PSYCHOLOGY OF PEACEMAKING/FIRST SEMINAR
See Psychology 246.

PSTD250 U.S. NATIONAL SECURITY/LECTURE, DISCUSSION
See Government and International Relations 250.

PSTD252 RACE AND AMERICAN SOCIETY/LECTURE, DISCUSSION
See Sociology 252.

PSTD253 SOCIAL MOVEMENTS, GLOBALIZATION AND THE STATE/ LECTURE, DISCUSSION
See International Development and Social Change 253.

PSTD262 LAW AND SOCIETY/LECTURE, DISCUSSION
See Sociology 262.

PSTD265 SOCIAL MOVEMENTS: QUEST FOR JUSTICE/VARIABLE FORMAT
See Sociology 265.

PSTD266 PRINCIPALS OF NEGOTIATION AND MEDIATION: AN OVERVIEW OF CONFLICT RESOLUTION APPROACHES
See International Development and Social Change 266.

PSTD285 SPECIAL TOPICS IN PEACE STUDIES/SEMINAR
Staff/Offered periodically

PSTD298 DIRECTED READINGS IN PEACE STUDIES
PSTD299 Peace Studies Internship

SOC243 POLITICAL SOCIOLOGY/VARIABLE FORMAT
See Sociology 243.

RACE AND ETHNIC RELATIONS

Program Faculty

María Acosta Cruz, Ph.D.
Parminder Bhachu, Ph.D.
Paul Burke, Ph.D.
Carol D'Lugo, Ph.D.
Debórah Dwork, Ph.D.
Jody Emel, Ph.D.
William Ferguson, Ph.D.
Odile Ferly, Ph.D.
Everett Fox, Ph.D.
Susan Hanson, Ph.D.
Betsy P. Huang, Ph.D.
Fern Johnson, Ph.D.
Willem Klooster, Ph.D.
Sharon Krefetz, Ph.D.
Thomas Kuehne, Ph.D.
Constance Montross, Ph.D.
Winston Napier, Ph.D.
Simon Payaslian, Ph.D.
Paul W. Posner, Ph.D.
Robert Ross, Ph.D.
Valerie Sperling, Ph.D.
Jaan Valsiner, Ph.D.

Principal Advisers

Beverly Grier, Ph.D., *- Director*
Janette Greenwood, Ph.D.
Shelly Tenenbaum, Ph.D.

Program Overview

Race and ethnic relations is an interdisciplinary concentration that enables students to examine relations within and between racial and ethnic groups primarily in the United States. The concentration brings together a wide range of courses in the humanities and social sciences that allow students to compare experiences across racial and ethnic groups. The concentration also allows students to compare the U.S. experience with that of other racially and ethnically diverse countries in Europe, the Middle East, Africa and Asia, past and present.

Undergraduate Requirements

Students fulfilling the race and ethnic relations concentration are required to take a minimum of six courses. Five of the six courses must be U.S.-based courses; one must focus on a country or region outside the United States.

- One course must be HIST016 Race and Ethnicity in American History, a humanities course. This course serves as the introductory course for the concentration.
- Two additional courses in the humanities (classics, English, foreign languages and literature, history). One of these courses must be a literature course.
- Three courses in the social sciences (cultural and global processes, geography, government, sociology).

- A minimum of three courses must be at the 200 level. One course must be an advanced seminar approved by the student's adviser. The advanced seminar serves as the capstone experience.
- One course whose focus is a country or region other than the United States.

Introductory Course

HIST016 Race and Ethnicity in American History

Humanities Courses

Choose at least two:

CMLT125 Crossing Boundaries
ENG114 American Talk
ENG182 African American Literature I
ENG183 African American Literature II
ENG215 Language and Culture in the United States
ENG257 Language at Issue
ENG276 Ethnic America: Literary and Theoretical Perspectives/Seminar
ENG279 Fictions of Asian American Literature
ENG291 Literature of the Harlem Renaissance
HIST021 Voices from Slavery
HIST113 Urban Landscapes: The City in American History from Colonial to Modern Times
HIST206 Africans in the Americas
HIST214 The American Civil War
HIST217 Reconstruction: America After the Civil War, 1865-1877/Seminar
HIST222 History of the South
HIST223 The Civil-Rights Movement
HIST235 The Atlantic World
MUSC151 Jazz History
SPAN117 Field Work in the Hispanic Community

Social Science Courses

Choose at least three:

GEOG090 Americans and Natural Resources
GOVT171 Urban Politics: People, Power and Conflict in U.S. Cities
GOVT221 Urban Policy Internship Seminar
PSYC156 Cultural Psychology
PSYC157 Cultural Psychology of Urban Living
SOC200 Class, Status and Power
SOC203 American Jewish Life
SOC252 Race and American Society

Courses on Race and Ethnicity Outside the United States

Choose at least one:

ARTH232 Converging Cultures in the Age of Discovery/Seminar
CLAS262 Jews and Christians in the Ancient World
CMLT130 The National Imagination
CMLT172 Islands in the Stream
CMLT208 Her Story: History and Fiction of Caribbean Women Writers
ENG254 Still Spaces–East Meets West
GOVT173 Introduction to Latin American Politics
GOVT178 South Africa: History and Contemporary Politics
GOVT210 Violence: The Case of the Middle East
GOVT228 Comparative Politics of Race, Ethnicity and Gender
GOVT230 Armenian Genocide
GOVT290 Inter-American Relations/Seminar
HIST173 History of Racial Thought in Modern Europe
HIST175 The History of the Holocaust to 1933
HIST234 Racial Thought and Body Politics in Modern Europe (1500-2000)
HIST242 History of Nationalism
HIST268 The Holocaust: Issues and Controversies/Seminar
HIST273 Life Under Occupation
HIST284 The Holocaust and its Aftermath
ID120 Introduction to Social Anthropology
SOC260 Roots and Routes: Immigrants, Diasporas and Travel
SPAN239 Hispanic-Caribbean Fiction
SPAN245 Hispanic American Short Story

Independent Study Courses

RER299 Sec. 1 Directed Readings
RER299 Sec. 5 Special Projects
RER299 Sec. 9 Internship

Courses

ARTH232 CONVERGING CULTURES IN THE AGE OF DISCOVERY/SEMINAR
See Art History 232.

CLAS262 JEWS AND CHRISTIANS IN THE ANCIENT WORLD
See Classics 262.

CMLT125 CROSSING BOUNDARIES/LECTURE, DISCUSSION
See Comparative Literature 125.

CMLT130 THE NATIONAL IMAGINATION
See Comparative Literature 130.

CMLT174 ISLANDS IN THE STREAM: PUERTO RICO AND THE FRENCH ANTILLES
See Comparative Literature 174.

ENG114 AMERICAN TALK/FIRST-YEAR SEMINAR
See English 114.

GEOG197 NATIVE AMERICANS AND NATURAL RESOURCES
See Geography 197.

GOVT171 URBAN POLITICS: PEOPLE, POWER AND CONFLICT IN U.S. CITIES/LECTURE, DISCUSSION
See Government and International Relations 171.

GOVT214 MASS MURDER AND GENOCIDE UNDER COMMUNISM/LECTURE, DISCUSSION
See Government and International Relations 214.

GOVT230 THE ARMENIAN GENOCIDE/LECTURE, DISCUSSION
See Government and International Relations 230.

GOVT282 HOUSING POLICIES AND POLITICS/SEMINAR
See Government and International Relations 282.

HIST016 RACE AND ETHNICITY IN AMERICAN HISTORY/LECTURE, DISCUSSION
See History 016.

HIST021 VOICES FROM SLAVERY/FIRST-YEAR SEMINAR
See History 021.

HIST113 URBAN LANDSCAPES: THE CITY IN AMERICAN HISTORY FROM COLONIAL TO MODERN TIMES/LECTURE, DISCUSSION
See History 113.

HIST152 Jews in Early Modern Europe and Colonial America/Lecture, Discussion
See History 152.

HIST153 Europe in the Age of Extremes: The 20th Century
See History 153.

HIST173 The History of Racial Thought in Modern Europe/Lecture, Discussion
See History 173.

HIST175 Holocaust: Agency and Action Lecture, Discussion
See History 175.

HIST206 Africans in the Americas, 1500-1888/Lecture, Discussion
See History 206.

HIST214 The American Civil War/Lecture, Discussion
See History 214.

HIST216 African American Internationalism/Proseminar
See History 216.

HIST217 Reconstruction: America after the Civil War, 1865-1877/Seminar
See History 217.

HIST221 From Slavery to Freedom/Lecture, Discussion
See History 221.

HIST222 History of the South/Lecture, Discussion
See History 222.

HIST223 The Civil-Rights Movement/Lecture, Discussion
See History 223.

HIST227 The Caribbean in the Era of Slavery, 1492-1886/Lecture, Discussion
See History 227.

HIST234 Racial Thought and Body Politics in Modern Europe (1500-2000)/Seminar
See History 234.

HIST235 The Atlantic World/Lecture, Discussion
See History 235.

HIST242 History of Nationalism/Lecture, Discussion
See History 242.

HIST268 The Holocaust: Issues and Controversies/Seminar
See History 268.

HIST273 Life Under Occupation/Seminar
See History 273.

ID120 Introduction to Cultural Anthropology/Lecture, Discussion
See International Development and Social Change 120.

MUSC151 Jazz History/Lecture, Tutorial
See Music 151.

PSYC156 Cultural Psychology/Lecture, Discussion
See Psychology 156.

PSYC157 Cultural Psychology of Urban Living/Lecture, Discussion
See Psychology 157.

RER021 Voices From Slavery/First-Year Seminar
See History 021.

RER103 Africa and the World/Lecture, Discussion
See Government and International Relations 103.

RER117 Field Work in the Latino Community
See Race and Ethnic Relations 117.

RER126 Cities and Suburbs/Variable Format
See Sociology 125.

RER178 South Africa: History and Contemporary Politics/Lecture, Discussion
See Government and International Relations 178.

RER182 African American Literature I/Lecture, Discussion
See English 182.

RER183 African American Literature II/Lecture, Discussion
See English 183.

RER200 Class, Status and Power/Variable Format
See Sociology 200.

RER200 Sec. 9 Internship
Staff/Offered every year

RER203 American Jewish Life/Variable Format
See Sociology 203.

RER208 Her Story: History and Fiction of Caribbean Women Writers
See Comparative Literature 208.

RER211 Politics and Development in Southern Africa/Seminar
See Government and International Relations 219.

RER215 Language and Culture in the United States/Lecture, Discussion
See English 215.

RER216 African American Internationalism/Proseminar
See History 216.

RER227 The Caribbean in the Era of Slavery, 1492-1886/Lecture, Discussion
See History 227.

RER234 Racial Thought and Body Politics in Modern Europe (1500-2000)/Seminar
See History 234.

RER235 The Atlantic World/Lecture, Discussion
See History 235.

RER252 Race and American Society/Lecture, Discussion
See Sociology 252.

RER257 Language at Issue/Seminar
See English 257.

RER265 Social Movements: Quest for Justice/Variable Format
See Sociology 265.

RER270 The African American Satirical Novel/Seminar
See English 270.

RER276 Ethnic America: Literary and Theoretical Perspectives/Seminar
See English 276.

RER277 Race and Gender in African American Literary Theory/Discussion
See English 277.

RER291 Literature of the Harlem Renaissance/Seminar
See English 291.

RER299 Sec. 1 Directed Readings
Staff/Offered every year

RER299 Sec. 5 Special Projects
Staff/Offered every year

SOC010 Introduction to Sociology/Variable Format
See Sociology 010.

SOC203 American Jewish Life/Variable Format
See Sociology 203.

SOC260 Roots and Routes: Immigrants, Diasporas and Travel/Lecture, Discussion
See Sociology 260.

SOC285 Social Policy, Immigration and Poverty/Seminar
See Sociology 285.

SPAN239 Hispanic Caribbean Fiction/Lecture, Discussion
See Spanish 239.

SPAN245 Hispanic-American Short Story/Lecture, Discussion
See Spanish 245.

URBAN DEVELOPMENT AND SOCIAL CHANGE

Program Faculty

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Program Overview

Urbanization has been one of the most powerful processes defining American life in the 20th century. More than three-quarters of the U.S. population is currently classified as urban, suggesting that in many ways understanding contemporary America requires understanding cities—the broad patterns and notable variations in their growth, decline, and in some cases, revitalization. The urban development and social change concentration provides students majoring in any field with a structured program of study that enables them to understand the historical, social, economic and political factors that have shaped U.S. cities and how cities have, in turn, affected the lives of their inhabitants.

The study of urban development and social change is all the more significant since more than half of the world's population will soon be living in cities, and urbanization will undoubtedly be one of the key forces shaping life in the 21st century.

Students in the urban development and social change concentration study the key concepts and methodological tools used to explore and analyze urban phenomena, focusing primarily on cities in the United States. Students may also choose to take a course that examines urbanization in other parts of the world. Proceeding from an introductory course through intermediate and advanced courses offered in several different departments, students then apply these concepts and methods in their capstone experience. The capstone can be either a research project or an internship, conducted under the supervision of one of the concentration's participating faculty or done as part of an urban-research or internship seminar.

For a capstone project, students in the concentration are encouraged to take advantage of the unparalleled opportunities for field research and applied learning that are offered by Clark's location in the center of Worcester. Like many medium-sized cities in the Northeast and Midwest, Worcester has experienced significant social, economic and political changes over the past few decades, which make it a superb laboratory for learning. Moreover, Clark's involvement in the University Park Partnership (UPP)—a partnership the University forged with neighborhood groups, businesses, and city and state government agencies—provides unique opportunities for students to contribute to innovative efforts to improve education, housing, and economic and social conditions in our inner-city neighborhood.

Students who pursue the Urban Development and Social Change concentration acquire a solid foundation for Clark's community development and planning master's program.

Undergraduate Requirements

1. Students must take a minimum of seven courses in the concentration, including the capstone project.
2. The seven courses must come from three or more different departments.
3. One of these courses, which should be taken at the outset, must be an introductory course selected from Group A.
4. One of these courses must be a research methods course, which should be taken as early as possible, selected from Group B.
5. At least three additional courses focusing on U.S. cities must be taken from Group C. At least two of these courses must be at the 200 level.
6. One of the seven courses may be selected from Group D and have a non-U.S, international or comparative focus.

7. One of the seven courses must include a culminating capstone experience, consisting of a research or internship project, done either as part of an urban-research or internship seminar or as a directed project supervised by a core faculty adviser or a participating faculty member in the urban development and social change concentration.
8. No more than two courses in the concentration can also be used to satisfy the requirements of a major, minor or other concentration (excluding courses required for the major).

Students pursuing the concentration will receive advice from one of the core faculty advisers on selecting appropriate courses for the concentration.

Courses

Group A: Introductory Courses

GEOG020 American Cities: Changing Spaces/Community Places
GOVT171 Urban Politics: People, Power and Conflict in U.S. Cities
HIST113 Urban Landscapes: The City in American History from Colonial to Modern Times
SOC125 Cities and Suburbs

Group B: Research Methods Courses

ECON160 Introduction to Statistical Analysis
GEOG141 Research Methods in Geography
GOVT107 Research Methods in Politics
SOC105 Social Research Process

Group C: U.S. Urban Courses

(*) indicates that the course may be used to fulfill the capstone requirement

ECON277 Urban Economics
EDUC112 Transformative Schooling: Documentary Video for Social Change
EDUC152 Complexities of Urban Schooling
GEOG244 Gender, Work and Space
GEOG254 Urban Transportation: Problems and Prospects
GEOG258 Utopian Visions, Urban Realities: Planning Cities for the 21st Century
GEOG262 Urban Economic Geography
GEOG280 Urban Ecology: Cities as Ecosystems
GOVT172 Suburbia: People and Politics
GOVT221 Urban Policy/Seminar and Internship*
GOVT282 Housing Policies and Politics*
HIST203 U.S. Urban History: Colonial–Modern Period*
HIST213 Gender and the City in the United States*
ID296 GIS and Local Planning
IDCE30211 Field Research in Youth Development and High-School Transformation*
IDCE332 Environmental and Social Impacts Assessment*
IDCE346 Practicum in Community Development and Planning*
PSYC211 Laboratory in Community Psychology*
SOC244 The Community
SOC285 Poverty Seminar
SOC299 Sec.9 Internships in Sociology* (depending on specific focus)
SPAN117 Field Work in the Latino Community

Group D: Comparative or International Courses

ARTH114 Ancient Cities and Sanctuaries
ARTH216 Architecture and Democracy
CMLT288 Art of the City: Paris and New York
SOC290 Cities in Global Perspective*
SOC232 Population, Environment and Development

Courses

ARTH114 Ancient Cities and Sanctuaries
See Art History 114.

ARTH216 Architecture and Democracy/Seminar
See Art History 216.

CMLT288 Art of the City: Paris and New York/Discussion
See Comparative Literature 288.

ECON160 Introduction to Statistical Analysis/Lecture, Discussion
See Economics 160.

ECON277 Urban Economics/Lecture, Discussion
See Economics 277.

EDUC112 Transformative Schooling: Documentary Video for Social Change/First-Year Seminar
See Education 112.

EDUC152 Complexities of Urban Schooling/Lecture, Discussion
See Education 152.

ENG281 American Literary Renaissance/Seminar
See English 281.

HIST113 Urban Landscapes: The City in American History from Colonial to Modern Times/Lecture, Discussion
See History 113.

HIST203 U.S. Urban History: Colonial-Modern Period/Seminar
See History 203.

HIST213 Gender and the City in the United States/Seminar
See History 213.

HIST218 Work and Play in the City: Then and Now
See History 218.

ID203 Program Evaluation for Youth and Community Development Initiatives
See International Development and Social Change 237.

ID204 International and Comparative Analysis of Community Development
See International Development and Social Change 204.

ID296 Vector GIS/Lecture, Laboratory
See International Development and Social Change 296.

IDCE30202 Land Use Seminar
See International Development, Community and Environment 30202.

IDCE30293 Youth and Community Development: Theory, Policy and Practice/Seminar
See International Development, Community and Environment 30293.

IDCE332 Sustainable Development Assessment and Planning
See International Development, Community and Environment 332.

IDCE344 Community Development and Planning Theory/Seminar
See International Development, Community and Environment 344.

IDCE346 Practicum in Community Development and Planning
See International Development, Community and Environment 346.

PSYC211 Laboratory in Community Psychology/ Laboratory, Discussion
See Psychology 211.

SOC290 Cities in Global Perspective/Seminar
See Sociology 290.

SOC299 Sec. 9 Internships in Sociology
See Sociology 299 Sec. 9.

UDSC011 Making a Difference/First-Year Seminar
See International Development and Social Change 011.

UDSC020 American Cities: Changing Spaces, Community Places/ Lecture, Discussion
See Geography 020.

UDSC105 Social Research Process/Lecture, Discussion
See Sociology 105.

UDSC107 Research Methods/Lecture, Discussion
See Government and International Relations 107.

UDSC117 Field Work in the Latino Community
See Spanish 117.

UDSC125 Cities and Suburbs/Variable Format
See Sociology 125.

UDSC141 Research Methods in Geography/Lecture, Discussion
See Geography 141.

UDSC171 Urban Politics: People, Power and Conflict in U.S. Cities/Lecture, Discussion
See Government and International Relations 171.

UDSC172 Suburbia: People and Politics/Lecture, Discussion
See Government and International Relations 172.

UDSC204 International and Comparative Analysis of Community Development
See International Development and Social Change 204.

UDSC218 Work and Play in the City: Then and Now
See History 218.

UDSC221 Urban Policy/Seminar and Internship
See Government and International Relations 221.

UDSC223 Suburban Policy Issues/Seminar
See Government and International Relations 223.

UDSC232 Population, Environment and Development/ Variable Format
See Sociology 232.

UDSC243 The Community/Lecture, Discussion
See Sociology 244.

UDSC244 Gender, Work and Space/Seminar
See Geography 244.

UDSC254 Urban Transportation: Problems and Prospects/ Lecture, Discussion
See Geography 254.

UDSC257 Utopian Visions, Urban Realities: Planning Cities for the 21st Century/Lecture, Discussion
See Geography 258.

UDSC262 Urban Economic Geography/Seminar
See Geography 262.

UDSC280 Urban Ecology: Cities as Ecosystems/Lecture, Discussion
See Geography 280.

UDSC282 Housing Policies and Politics/Seminar
See Government and International Relations 282.

UDSC285 Social Policy, Immigration and Poverty/Seminar
See Sociology 285.

UDSC296 Vector GIS/Lecture, Laboratory
See International Development and Social Change 296.

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Academic Calendar
2007-2008

FALL 2007

Aug. 27	First day of classes
Sept. 3	Labor Day – no classes
Oct. 8-9	Midterm break – no classes
Nov. 21-23	Thanksgiving Recess
Dec. 10	Last day of classes
Dec. 11-12, 15-16	Reading Days
Dec. 13-14, 17-18	Final Exams
Dec. 19	Exam make-up day

SPRING 2008

Jan. 14	First day of classes
Jan. 21	Martin Luther King Day – no classes
March 3-7	Midterm break
April 28	Last day of classes
April 29-30, May 3-4	Reading Days
May 1-2, 5-6	Final Exams
May 18	Commencement

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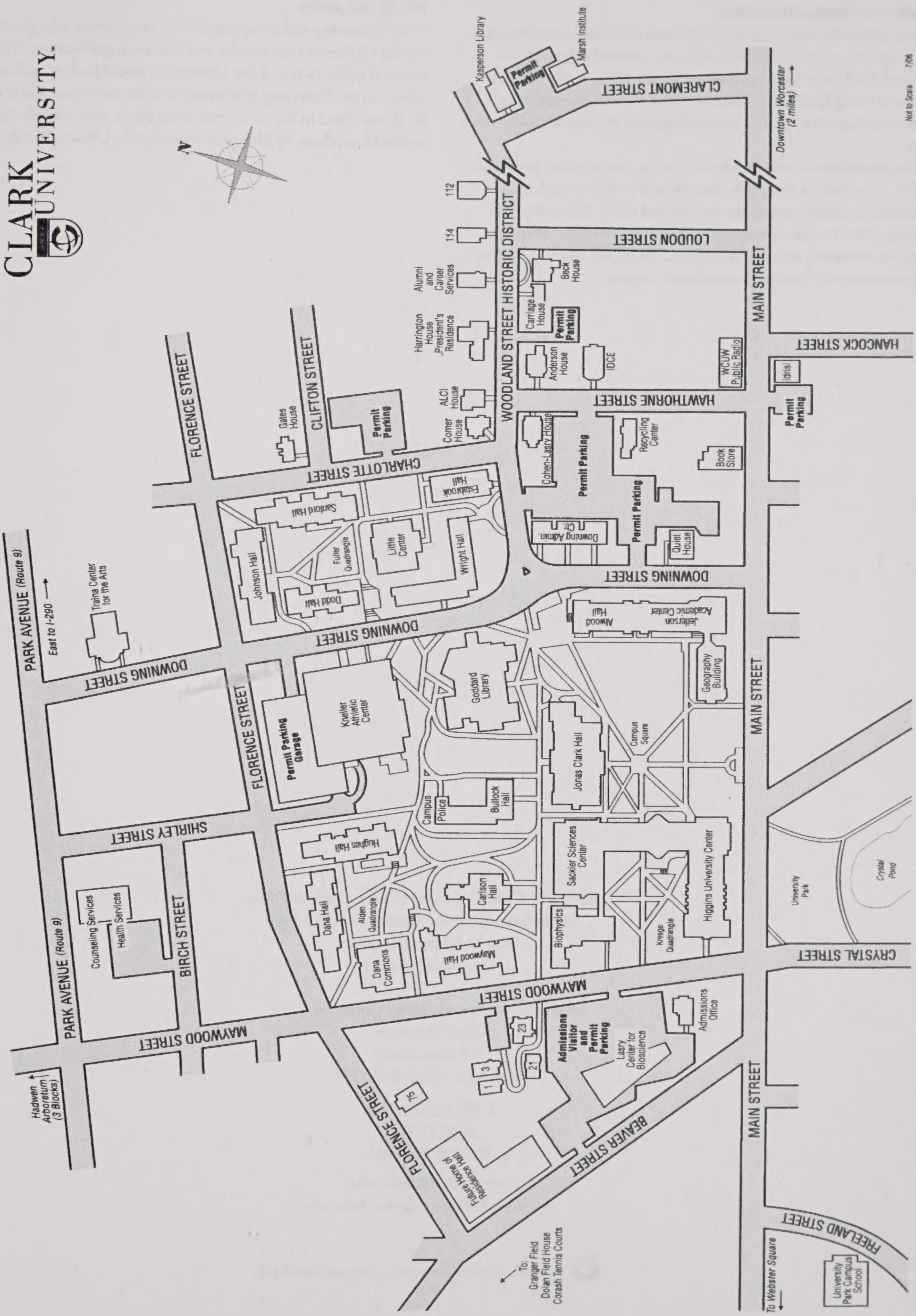
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